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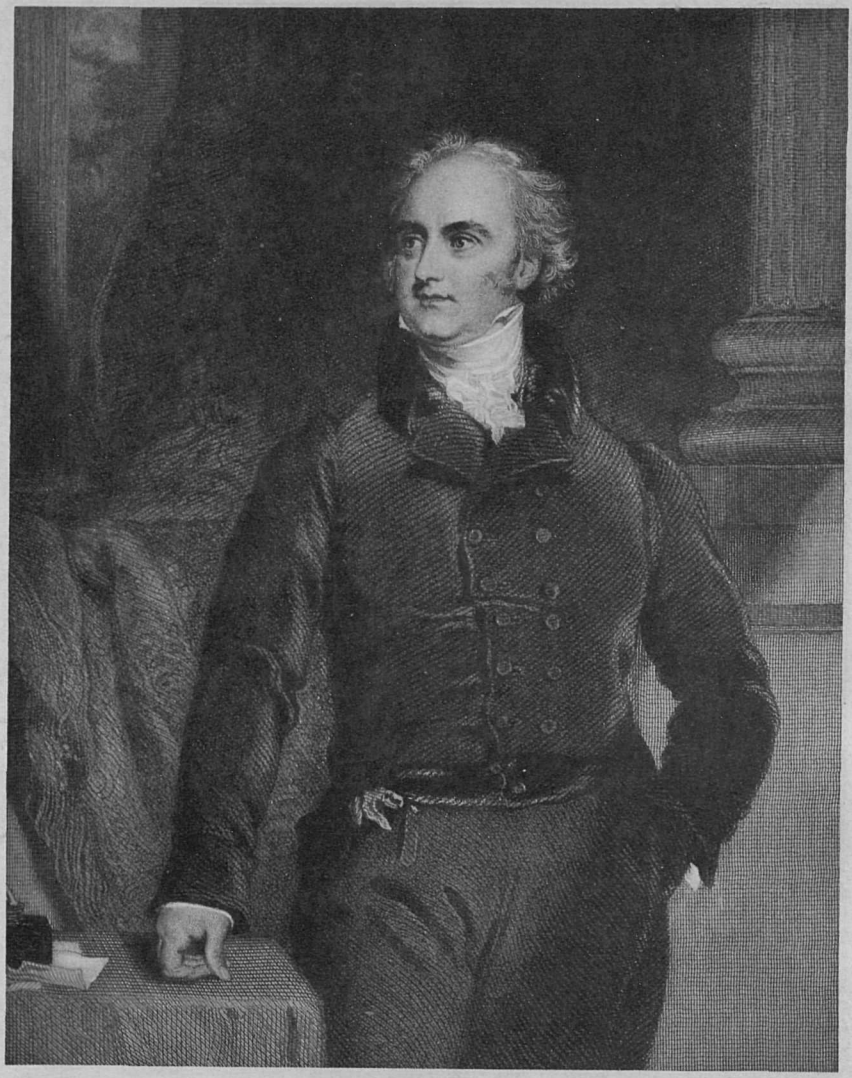

Astley Paston Cooper

Surgeon to Guy's Hospital 1800-1825.

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GUY'S HOSPITAL GAZETTE.

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Passim.

CHRISTMAS is over and done with. After a week of decorations, concerts, theatricals —and one hour of dancing—the Hospital has resumed its ordinary staid appearance. It is no longer a case of "toffee for breakfast, toffee for dinner, and toffee for tea." Our diet is again plain, wholesome and unstimulating, and we shudder at the mere mention of cake and chocolate cream. Our talk is again grave and sober, and we speak only of lectures, examinations, and our several hospital engagements. After all, most of us have had a Merry Christmas, and it only remains in this, the first number of the GAZETTE of 1906, to wish all our readers a Happy New Year.

THERE can be little doubt that the week which has just passed was, taken all over, as successful as any Christmas week before. The patients obviously enjoyed themselves, and no doubt were duly thankful that if they had to be ill, their affliction should come at Christmas time. The Residents worked like "*Niggers*," and disclosed altogether unsuspected talents for entertainment. It is always the same. Is any one Resident voted by general consent a dull dog, a fellow of no parts and no possibilities, then it is just this very man who in Christmas week most upsets calculation, shows up best, and covers himself with the greatest glory. And lastly, there can be no doubt that, in the Christmas of 1905, for some reason or another, the Staff were more than usually interested in all that went on, just as they were even more than usually generous in their offers of help.

THE remaining concerts were all extremely successful. On Friday afternoon, although Luke and Lazarus were offering rival attractions, both wards were crowded, and the programme in both was excellent. We have never seen a ward more crowded than Luke—the ward itself was filled from door to door, and beyond into the passage and into Charity there stretched a long line tip-toeing and craning their necks—while Mr. Stanley Brett, Mr. Courtice Pounds and the rest were singing.

THE week ended in Astley Cooper on just the right note. Quite rightly, the best of the Hospital talent had been kept to the last, and Messrs. Payne, Chapple and Edridge were encored again and again. It is only natural that we should most appreciate the home-grown product, though perhaps it is not the best or most gracious way to show our very genuine

gratitude to the many ladies and gentlemen who have helped throughout the week.

ONE of the most enjoyable events of this Christmas was provided by the nurses in the entertainment in the Nurses' Home, on Tuesday, December 29th. Songs, music and tableaux followed each other in quick succession, and one could only wonder how such busy people as the nurses could find time, by night or day, for the devising, arranging and rehearsing of a performance which went without a hitch from start to finish. In the course of the evening there was so much genuine wit and humour shown that the heresy that a woman cannot make a joke (which, together with the conviction that a Scotchman cannot see one, is consolation to the dullest Englishman) must have received a shrewd blow.

WHEN the curtain was rung down finally, at the suggestion of the Matron herself, the Dining Hall was cleared, and the very first Hospital dance on record was begun. We say the *first* Hospital dance, for the Annual Ball of the Residents can hardly claim to be a representative Hospital dance. At least the representation is too one-sided. If of the men most of us are Guy's students, one's partner is apt to live at Kensington or Streatham, and often the best that she can lay claim to is a remote kinship with some member of the staff, or a certificate from a first-aid course of lectures. During the evening one thing only could have been bettered,—the grave injustice to the night nurses. So soon as that part of the performance for which they were directly responsible was over, they had to scurry off to their several wards, where from time to time was carried the tantalising sound "of musick and of dancing." We do not pretend to say how this can be remedied. Another year we have no doubt that, like Sentimental Tommy, the Matron "will find a way."

THE midnight celebrations which usher in the New Year, around the statue of the Founder, for once fell, as was expected, a little flat. It is an unfortunate, but as things stand unavoidable, accident that the last day of the year should fall upon a Sunday. Naturally, it was not to be expected that any very large number of men, after a sober Sunday—spent, no doubt, in making what are called good resolutions, in scheming to avoid in the New Year the unpleasant consequences of the mistakes of the old—should summon up energy for a midnight carnival. As a matter of fact, only a very few put in an appearance, and it is a moot point whether, under such circumstances, it would not have been as well to omit the bonfire altogether.

BEING few in number, those midnight revellers who did turn up decided to hide the smallness of their number by a very lavish display—at other people's expense. They therefore succeeded in purloining a cask of varnish and a large quantity of paraffin, and thrust it upon the fire, with the result that the unhappy Residents, whose pockets have already been pretty well depleted by their exertions in Christmas week, have had to pay the bill to the amount of forty-five shillings. We are told that we have only to mention this and the hot-headed but generous persons responsible will come forward and refund the amount. Until this is done, no words can be too strong to apply to such conduct. Not only does it fall very heavily upon the Residents, who have already given all the time and money they can spare in our entertainment, but it is likely to ensure the authorities taking the long-threatened step of abolishing the bonfire altogether.

THE New Year has opened well with two exceedingly generous donations to the Hospital. "Marnie" sends £1,000, and also Mr. Robert Lodge sends a cheque for the same amount, for the purpose of endowing a bed in memory of the late Robert John Lodge. This latter contribution is in recognition of the benefit derived from an operation performed by one of our surgeons. We hope the example set by these two generous individuals will be followed by many others.

THE second number of our little contemporary has appeared, and we own to a certain feeling

of disappointment. It began so well, save for the initial error of a too ambitious title, that we had come to anticipate for it a certain measure of success, and had almost grown to think its much-vaunted six months' guarantee an unnecessary, although, under the circumstances, a perfectly natural, precaution. In the present number there is a distinct falling off. Much of it seems so unnecessary. A few weeks ago, in Passim, we gave the new paper a word of encouragement which apparently has not been taken in the right spirit, and "Scopes" has degenerated into a number of short paragraphs expostulating and protesting against a chance remark. We hasten to withdraw. Call it the "Guyoscope" by all means. If even the least of "*the members of the older staff*" is a contributor to the present number, if Mr. Stanley Cock, after the present issue, is still willing to identify himself with the production and to play the Triton among minnows, we apologise and withdraw, reserving our congratulations for Mr. Ham ("*at present unfortunately beyond our reach in Australia*"). Why, we shall be told next that Dr. Miller or Dr. Cazenove is responsible for the humorous mis-spellings of the office boy, or for Glady's suggestive hints on dress. Some verses "The Trio," took our fancy, and the cartoons were good, but the rest fell below the mark, and the requisite number of pages had apparently to be made up by reports of concerts and theatricals, which, however correct in matters of fact, could hardly be expected to prove diverting,—and next month there will be no concerts.

THE Royal College of Surgeons has issued the regulations relating to the Begley studentship in surgery and anatomy. This studentship, which is tenable for three years, has been established by funds left for that purpose by the late Mrs. Jane Begley, of Hammersmith. The regulations specify that the studentship will consist of the dividends (£20 per annum) derived from the Begley bequest, and will be tenable for three years. The studentship will be awarded in April, 1906, and thereafter triennially, or at such time as any studentship may become vacant. It will be open, on the occasion of the first award, to any candidate admitted to the second examination of the Conjoint Examining Board in England, held in April, 1906, and will be awarded to the candidate obtaining the highest number of marks in the anatomical part of the examination.

IT is always a doubtful point whether one and the same set of examination papers can serve this double purpose and be effective, not only in determining the minimum amount of knowledge which shall achieve success, who shall pass and who shall fail, but also in deciding, at the other end of the scale, which candidate is absolutely the most proficient. From this point of view the innovation of establishing a scholarship in the Conjoint Board examinations may not prove an unmixed blessing. One or other of two results is almost bound to occur. Either the standard of the papers will grow appreciably harder, or we shall be confronted by anomalies such as occur among other bodies whose examinations have to bear the same double strain,—the University of London, for instance,—that a candidate rejected entirely at one time may achieve at the next attempt, a few months later, the highest honours. If much importance is to be attached to such distinctions, those who scraped through the examination at the first time of asking are likely to be left wondering wherein exactly they have scored.

AN extremely good photograph has been taken of the Nigger Troupe, as well as several of the Residents' Theatricals. Copies of the former can be had, price 1s. each, on application to Mr. H. J. Henderson, at the College. All profits will go to the Million Shilling Fund.

THE annual dinner of the Debating Society will be held in the College at 7 p.m. on Saturday, February 3rd, 1906, when the President, Dr. Savage, will deliver an address on "Legal and other Reminiscences." Tickets, price 3s. each, can be obtained from the honorary secretaries, the committee, or from the porters at the College Lodge. It is hoped that there will be as large an assembly as possible to welcome Dr. Savage.

ON Wednesday, January 10th, Mr. Arthur Clavell Salter, K.C., the Conservative and Unionist candidate for West Southwark, held a short meeting in the College, in which he asked all Guy's men, whose political opinions permitted, to spend some part, or the whole, of Wednesday next, in working to aid in his return. Mr. Salter is justified in making a special appeal to Guy's men, for he is a nephew of the late Mr. James Salter, F.R.S., the man to whom we owe, more than to any other, our present flourishing Dental School.

WE would remind our readers that the subscription of twelve shillings and sixpence to the Clubs' Union for the GAZETTE and REPORTS fell due on the 1st instant. The subscription to the GAZETTE alone, seven shillings and sixpence, is also due, and cheques and postal orders should be made payable to Mr. C. H. Wells, Guy's Hospital, and forwarded as soon as possible. An index and title-page for the volume just completed has been prepared, and may be obtained from the librarian. Subscribers can now have ther sets of the GAZETTE bound for one shilling and sixpence a volume by leaving them with the librarian. The binding is in two shades of blue cloth—navy blue or a lighter tint—with the arms of the Hospital in gold.

Change of Address.

Dr. Charles Edwards, from Cotham, 104, Shooter's Hill Road, Blackheath, to Granville House, Bridport.

Staff-Surgeon F. Davidson Lumley, R.N., from 24, Emperor's Gate, South Kensington, S.W., to H.M.S. *Nile*, Devonport.

Dr. T. Davys Manning, from Hoddesden, Herts, to Rodwell, Weymouth.

Dr. W. Gibson Parker, from Earlsmead, Brentford, to Western Lodge, Upper Walthamstow Road, Walthamstow, N.E.

Dr. Vaughan Pendred, F.R.C.S., from Greville House, Buckingham, to 2, Lansdowne Place, Coventry.

Dr. Thomas Spurgin, from the Manor House, Ongar, Essex, to Crofton, St. Paul's Road, Bournemouth.

Dr. M. Bramley Taylor, from Guy's Hospital, to Elmdale, Belmont Road, Uxbridge.

Dr. E. J. Tangue, from Rocklands, East Grinstead, to Winterton, Doncaster.

Mr. F. Stockman Vine, L.D.S., from 23, Grange Road, to 58, Finsbury Pavement, E.C.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Varieties of Morbid Respiration.

CLINICAL LECTURE BY DR. FREDK. TAYLOR.

December 7th, 1905.

GENTLEMEN,—I have come to-day without any reports of cases, though it would be easy to find one which illustrates the subject for discussion this afternoon, namely, dyspnœa or morbid respiration. I say morbid respiration, because the word dyspnœa seems to imply, etymologically, a *difficulty* in breathing, but the name does not really cover the other frequent forms of disturbance which cannot all be called difficulty. Indeed, every kind of rapid breathing is commonly called dyspnœa. We have no term which signifies mere rapidity of the movements of respiration.

It may be thought that in dealing with this subject I shall have to enter deeply into physiology, but I shall confine myself as far as possible to the clinical side of the subject. I must, however, remind you that healthy breathing depends on the perfection of the different physiological systems, and on the perfection of certain physiological processes; especially does it require the normal heart acting under normal conditions, normal lungs acting under normal conditions, a normal state of the blood, and a healthy nervous system. The respiration, as we know, is primarily intended for the aeration of the blood, or perhaps I should say of the tissues, because eventually the blood carries oxygen to the tissues. It is for this reason that air must get into the lungs, and blood must be sent from the heart to the lungs, and the blood must be of the normal composition, and have such corpuscular value that it may be utilised for the purpose. The nervous system also must be in such perfect operation as to properly co-ordinate the heart and lungs.

After that very brief physiological introduction, let us turn to the clinical side of the picture. You must remember we have the term "shortness of breath," which is expressive of almost any kind of difficulty, even the slightest deviation from the normal which can be perceived, even in persons who are at the time normal. If we make a physical effort of any kind, we become short of breath, and that is a healthy condition, or at any rate it is the slightest departure from the healthy condition. The exertion, no doubt, requires a greater

rapidity of the heart, and respiration has to follow suit, so that quicker breathing occurs. No doubt, also, the quicker respirations serve the purpose of supplying the material used for the quicker processes which are taking place in consequence of the exertion. This rapid breathing which takes place in a healthy person has no pathological significance, and we can at once dispose of it. But what is of interest, pathologically and clinically, is that many people who are are out of health have a quicker respiration, and often have dyspnœa as a result of exertion, which, in health, would not cause it. Thus dyspnœa on exertion is one of the indications that a person is out of health; and when we see it we have to watch the individual, so as to find out what is at fault, whether the heart, the lungs or the blood. The familiar cases of this slight deviation from the normal are such conditions of modified health as when a person is recovering from a severe illness, so-called *convalescence*, when no one organ is specially affected, but the whole system is below par. The several conditions of *anæmia* are almost invariably accompanied by shortness of breath—chlorosis and pernicious anæmia, and the anæmia which is due to loss of blood. There is also shortness of breath in almost every *pulmonary disease*, and in almost all *diseases of the heart*. Whenever pulmonary disease is sufficient to alter materially the amount of lung which is available for respiration, there must be a disturbed relation between respiration and the supply of air, and the patient is obliged to breathe more quickly, so as to introduce a larger amount of air in a given time. As an ordinary instance, we may take bronchitis in its various forms. A small amount of bronchial catarrh will not materially shorten the breath, but if the catarrh is extensive, patients find that when they walk quickly or go upstairs or uphill, their breath is manifestly shorter and more difficult. The same is observed in any severer pulmonary disease in which, nevertheless, the patient can walk about; and if, as in pneumonia, severe phthisis or pleurisy, the patient is confined to bed, the patient may show the dyspnœa even when he is quiet. Shortness of breath is a condition which you should always be alert to observe, because sometimes it may be a valuable help in the diagnosis of disease. The patient who is affected by some of these pulmonary diseases to which I have referred, not only breathes more rapidly, but the necessity of his getting plenty of air into the chest, materially interferes with his ordinary vocal utterance; he cannot utter so many syllables consecutively as he can in health, because the use of his larynx for phonation is interrupted by the necessity of breathing. If you are alive to this you may sometimes arrive at a diagnosis quicker than you otherwise would. But a very similar condition is sometimes caused by nervousness without any accompanying disease of the heart or lungs. Thus, individuals, on first coming to a doctor, sometimes lose their nervous balance a little, and their breathing may be short, and their talking interrupted so as to suggest the presence of some organic disease.

We now come to the rapid breathing, the so-called dyspnœa, of *acute illnesses*. This, of course, is almost universal, and undoubtedly it is dependent to a very large extent upon the mere fact of fever; and it varies with the degree of fever present. In a patient who is suffering from typhoid fever, or the fever of tuberculosis, or one of those fevers in which the temperature is low in the morning and high in the evening, you will find both pulse and respiration vary in the same way; when the temperature comes down, the number of respirations and the rate of the pulse falls also; and when the temperature again rises, the others rise more or less in proportion. In the simpler cases to which I am now referring, this increased respiration is independent of any local disease. Such persons need not have any pulmonary complaint, their lungs may be perfectly healthy structurally, free from inflammation and from bronchial catarrh, and yet respiration will vary in this way, and vary considerably. This condition is probably a combined one; it may be partly due to an associated influence of the heart; *i.e.*, the patient is febrile, the heart is quickened, and the quickening of the heart necessarily leads to a quickening of the respiration. Very likely, also, it is partly due to the circulation of toxines in the respiratory centre, with consequent stimulation of that centre. This dependence of the dyspnœa upon both the fever and the pulmonary lesion should make us careful in drawing inferences with a view to diagnosis or prognosis. For instance, you know that in pneumonia the respiration is generally quickened, and that fact can be utilised for purposes of diagnosis. The frequency of respiration is higher in relation to the frequency of the pulse than in most other febrile diseases. That is to say, with a pulse of 100, the respirations are likely to be 45 or even 50; whereas in other complaints pulses of 100 with high temperature may be accompanied by respiration rates of 25 or 30.

That is readily intelligible if we remember that one or other lung is in great part solid; so that to that extent it fails to serve the process of respiration; the defect has to be made up by the remaining lung. There is thus a need for the respiration-rate to be increased, so as to compensate for the loss of surface which the pneumonia involves. This undoubtedly will account for much of the quickened respiration in pneumonia. But I think there can be no doubt that a great part of the quickened respiration in pneumonia is due to the toxines which produce pneumonia. One important fact is, that the frequency of the respiration as seen in different cases is not itself directly in proportion to the amount of lung involved; and that in some cases of pneumonia, especially the ordinary croupous or lobar pneumonia, the respirations may reach an extraordinary frequency when the amount of consolidation is not great. For instance, in a typical case of this kind, the respirations reach 70, 80, and even 90 per minute. A case occurred in the Clinical ward three or four years ago in which I counted 96 to the minute, and it was said that 100 had been counted on the same day. At the time I was told that the statement had been made that a fatal prognosis must be given in a case of pneumonia in which the respirations are exceedingly rapid. I believe the increased rapidity is due very largely to some accidental relation of the toxines, or the localization of their action on the respiratory centres, or other nerve centres, and that the general prognosis is not necessarily dependent upon that alone. I do not say that, broadly speaking, cases are not worse when the respiration is very rapid; but I do not think you should say, "The respirations have reached such and such a figure, 70 or 80, therefore the patient must die." This condition is not the only factor in this disease; patients may certainly recover in spite of it, as is shown by the case I have quoted; for the patient got quite well. Another interesting fact as showing that the rapidity of respiration is not dependent solely on the amount of lung involved is, that when the crisis takes place in pneumonia and the temperature falls sometimes 4° or 5° in twelve hours, and the respiration and pulse fall also, these remarkable changes take place, while the condition of the lung is practically the same. For, as is well known, the physical signs of consolidation persist in some cases for many days after the crisis has occurred. This, alone, shows that the rapidity of respiration does not depend on the extent of lung involved, but on another factor.

The following relation of dyspnœa to diagnosis is of interest and importance. Patients with fever, who are extremely bad and prostrate, and in the worst stages of the fever, have what is described as hypostatic congestion. It used to be called hypostatic pneumonia. The condition is not strictly inflammatory. It is a congestion of the bases of the lungs behind, which is the combined result of feeble circulation, a dependent position, and exposure to pressure; for the base of the lung is not only the lowest part, but it is in such a position that when the patient lies upon his back, subject to compression by the weight of the liver and spleen, and perhaps other viscera. Its vessels are at the extreme end of the pulmonary circulation, so that a feeble heart will necessarily leave it somewhat unprovided for. Congestion and œdema take place in that part, and the other parts of the lungs have to compensate for the disabilities which the bases suffer. It is a practical point to observe that in those cases the upper part of the chest is liable to considerable over-action, owing to the bases being involved. If in such a case you see the upper part of the chest rising and falling in a pronounced way, and you find there is much supplementary breath sound, you may feel convinced that the bases are involved to some extent, and it will signify that the disease is in an advanced stage.

The diagnosis of pneumonia in children is sometimes assisted by the character of the breathing. The rhythm of the respiratory act is altered, so that the child makes a pause in its respiration, between inspiration and expiration, instead of between expiration and inspiration. Normally the sequence is inspiration, then expiration, then a pause; that is, a slightly longer pause than that which occurs between inspiration and expiration. But a child with pneumonia nearly always breathes in the inverse way. An inspiration is taken, and the breath is held for a time, and the chest is fixed in a position of inspiration. Then it is relaxed, and expiration occurs, and is followed at once by another inspiration. Expiration is often accompanied by a grunting noise, which further attracts attention. It is, I think, not absolutely diagnostic, as the same event may occur in pleurisy without obvious pneumonia.

The help in diagnosis to be derived from rapidity of respiration is illustrated in another class of case. Among the puzzling cases which we meet with so frequently are those of prolonged febrile reaction without apparent adequate cause. It is one of the commonest problems which come before us. When the fever first

appears the practitioner is called upon to make a diagnosis. Influenza and typhoid are often suggested, but in the course of a week or ten days the fever may still be present and none of the characteristic signs of typhoid have presented themselves. Then the question arises as to what the fever really is. When you have got as far as that, tuberculosis and malignant endocarditis are apt to suggest themselves as possibilities. In relation to tuberculosis, you know that the kind of tuberculosis which will cause continuous fever of this kind is general miliary tuberculosis. If, in a case of this kind, somewhere about the third week, you find, in association with unexplained fever, that the respirations are rapid, you will have good grounds for suspecting tuberculosis of the lungs. But, judging from my own experience, I would say, do not too hastily assume that the deposit of tubercle will bring about a quickening of respiration early in the case. I have an instance in mind which I saw at the end of the third week, where the doctor had gone through these trying conditions I have spoken of. Influenza had been talked of, and typhoid fever. Then, at the end of the third week, he was confident of neither. When I carefully examined the patient I could not find any physical signs of either pulmonary or heart disease, nor any evidence of typhoid fever. I took particular note of the fact that the respirations were relatively slow, and they were so little quickened that I felt almost justified in expressing considerable doubt about there being any pulmonary disease or miliary tuberculosis as the cause of the trouble. If it had been general tuberculosis I thought it would have indicated itself by means of rapid respiration by that time. I left the diagnosis a somewhat open one, with possibilities in one or two directions. A month afterwards the condition of fever was the same, but there was no development to help a diagnosis. In another month there were râles at the apices of the lungs, and a month later still the patient had died of general tuberculosis. One must admit that general tuberculosis is exceedingly variable in the way it develops, but it often shows itself first as a febrile disease, and the pulmonary symptoms occur at varying intervals from the commencement of the first symptom. If you see a case towards the end the condition is sometimes very characteristic; there are very rapid breathing, a livid appearance, and crackling râles and bronchitic sounds in the lungs. But it is in the early stages that one wishes, if possible, to make a diagnosis, and you cannot always get the assistance from the occurrence of dyspnœa that the final pathological conditions would lead you to expect.

Another kind of rapid breathing which must be borne in mind is that which accompanies hysteria. I have already briefly referred to nervous breathing, which you would scarcely call hysterical; it is the nervousness to which so many are liable. But the nervous breathing of pure hysteria is an extremely interesting thing to watch in its most pronounced forms. Some time ago there was in my ward a young female who was apparently healthy, except that the face was rather dusky. She was well nourished, and not febrile, and we could not discover anything wrong with the lungs or heart. But her respiration was constantly 50 to 60 per minute. Our suggestion that she could avoid it and that it was not a real disease was scouted by her with indignation. But when she was asleep her respirations were normal, *i.e.*, 16 to 17 per minute. However, I do not suppose the patient was doing it voluntarily; it was not malingering, but hysteria, a failure of the nervous apparatus, of which the patient was not conscious, and in which she had no voluntary share. We did not cure her; she went out very much the same. But there are some cases of nervous dyspnœa which are different from that. In the case I mention it was simply a panting respiration; there was no suggestion in anyone's mind that she had any real obstructive difficulty. But there are some cases of hysterical dyspnœa which present indications of some obstruction about the larynx or trachea, but in which there is no actual organic obstruction. Years ago a woman came into the hospital who had been tracheotomised on account of supposed laryngeal obstruction, and her liver had been perforated by a trochar for supposed hydatid. She was tracheotomised again here because she was supposed to have laryngeal obstruction. But I can perhaps more usefully speak of this class of case when I have spoken of those cases of true dyspnœa, which are really cases of difficult respiration, and are due to an interference with the entry of air into the air vesicle.

The seat of obstruction may be anywhere between the air vesicles themselves and the larynx, or, indeed, we might say the mouth or the nose. The air vesicles themselves may be filled with the products of inflammation of the lung, or with the mucus and pus of bronchitis, or with the fluid effused in œdema of the lung, or with portions of malignant growth; and they may be compressed by pleural effusions, or by any encroachment on that portion of the

thoracic cavity properly devoted to the lungs, on the side of the heart, the great arteries, the liver, or the abdomen generally.

The smaller bronchial tubes are obstructed by secretions in bronchitis, in broncho-pneumonia, in œdema of the lung, and by muscular spasmodic contraction of their walls in asthma.

We may consider as allied to this the dyspnœa of marked emphysema, in which indeed the tubes and air vesicles may be patent, but in which the permanently distended condition of the air vesicles so diminishes the difference between their size during expiration and inspiration, that it is equivalent to half filling each air vesicle with something of no respiratory value.

The chief cause of obstruction of the middle-sized bronchi is bronchitis, acute, or chronic; but they are also obstructed sometimes by malignant growths.

The cause of obstruction of the main bronchi, that is the right and left bronchi at the roots of the lungs, are foreign bodies within them, aneurysm and new growths pressing from outside, and cicatricial contraction after ulceration, of which syphilis is the chief cause. In the trachea and large tubes, also, diphtheritic membrane causes very important obstruction, which is a factor in the dyspnœa occurring after tracheotomy for this disease. But prior to operation, the tracheitis, if present, is masked by the still more dangerous laryngeal inflammation, while in later stages it is probably less destructive than the broncho-pneumonia which results from the downward course of the infection.

It is, however, interesting to note that croup, which is now regarded as nearly always diphtherial laryngitis, had formerly for its technical name, *cynanche trachealis*—or tracheal strangling.

The larynx, from the narrowness of the glottis, from its position at the entrance of the respiratory passages, and from its possession of a complicated muscular apparatus for purposes of phonation, respiration, and the protection of the lungs is peculiarly liable to be the seat of obstruction. Among these are all forms of laryngitis, whether simply catarrhal or diphtherial, inflammatory œdema, foreign bodies, and new growths; and to a degree not seen in other parts of the tract, the results of nerve disturbance in the form of spasm or paralysis. Of the latter conditions the most interesting and important, as causes of persistent obstruction, are double paralysis of the laryngeal abductors, and that condition which leads to chronic infantile stridor.

A certain amount of obstruction also occurs from lesions of parts somewhat higher than the larynx; such are a retropharyngeal abscess, severe glossitis, paralysis of the palate, as in the stertor of apoplexy, adenoids, and polypi, and other lesions of the nose. In the two latter dyspnœa is obviated by opening the mouth; and glossitis is generally sufficiently obvious; but a retropharyngeal abscess, unless its possible existence is called to mind, or a digital examination is made, may certainly be occasionally overlooked or misunderstood.

Now in these different kinds of obstruction, frequency of respiration is not, except in late stages of the disease, an important feature. But the characteristics are more or less marked according to the severity of the trouble: (*a*) cyanosis; (*b*) evidences of obstruction in the movements of the chest, and (*c*) modifications of the breath sounds.

(*a*) In other forms of dyspnœa cyanosis may be present; but so long as the dyspnœa is chiefly a frequency of respiration, by which frequency the defect in each respiratory movement is largely compensated, the necessary amount of aeration is quite or almost obtained, and cyanosis may be absent. The same is true to a certain extent of these lesions, especially when they affect only a small area of the air vesicles themselves; but in proportion as they block the larger tubes, or even the larynx, the areas of lung involved become more extensive, the function of breathing is correspondingly prejudiced, and cyanosis is more pronounced.

(*b*) In febrile dyspnœa the movements of the chest are frequent, but relatively slight in extent; in these obstructive cases the movements are generally extensive, in the apparent effort to draw in air past the obstructing point. This produces a very characteristic condition, often described as sucking-in of the intercostal spaces. The explanation of this is simple: in obedience to the stimulus from the carbonised respiratory centre, the chief inspiratory muscle, the diaphragm contracts; but the air cannot get past the obstruction, and between the obstruction and the diaphragm there is produced a tendency to a vacuum, and atmospheric pressure drives in the most yielding portion of the chest wall, namely, the intercostal space.

In the soft and yielding chests of children suffering from laryngeal obstruction, not only the intercostal spaces, but the lower ribs are extensively drawn in; and the amount of this "sucking-in" forms an important guide to the

degree of obstruction, and should always be carefully considered when the question of operative interference in laryngeal diphtheria is entertained. Even in adults, in spite of the more rigid consistence of the ribs, this effect may be produced by much laryngeal obstruction.

(*c*) The modifications of the breath sounds are the following: Diminution of the true vesicular murmur over the part of the lungs involved, and an adventitious sound whenever the obstruction is of such a kind, or in such a position, as to allow vibrations to occur. When the obstruction is caused by mucous fluid in the small bronchi, minute râles are often produced; but if a quantity of viscid pus is present, the passage of air through it may be impossible, and the respiratory movement is almost silent. If the obstruction is in the smaller tubes, the various sounds known as sibili and rhonchi are heard; and if in the main bronchi or trachea, or larynx, the sound is louder and more resonant, and is commonly described as stridor. It is important to try and distinguish between the *single* sound of stridor which an obstruction in the trachea or larynx will produce, and the numerous different and changeable sounds which a widely-diffused bronchitis or asthma will cause.

As a practical point it is often desirable to be sure whether an obstruction causing dyspnœa is in the larynx or in some part of the respiratory tract lower down, because the former may be relieved by tracheotomy; the latter, as a rule, cannot.

In most cases in which the larynx, trachea and large bronchi are involved, the stridor is heard both with inspiration and expiration; there are certainly two exceptions to that rule, namely, in the stridor of double abductor paralysis and in chronic infantile stridor in which the noise occurs during inspiration only. This does not help with most cases coming before us. Sometimes assistance can be obtained with the laryngoscope, by which the exact condition of the larynx, whether normal or diseased, can be seen. But this is rarely possible in small children, and not always in adults. When the obstruction is in the larynx, rising and falling movements of that structure in the neck are generally very pronounced; whereas the movements are slight when the larynx is not involved.

I may go back for a moment to hysterical dyspnœa, in which the obstructive form is simulated. Double abductor paralysis is characterised by an inspiratory stridor, which is due to the fact that the vocal cords cannot be abducted, and as a fact lie in close proximity; when a breath is taken, they are drawn even closer together, but the expiratory current separates them a little and passes out with little or no audible vibrations. This inspiratory stridor is often very loud, and is in many cases more pronounced when the patients are asleep than when they are awake.

Now this condition is certainly simulated sometimes by hysteria; and it is not surprising, seeing that everyone in health can voluntarily allow his cords to lie in the way of the entering current of air, and thus produce a similar stridor. I have little doubt that it was some such condition that was present in the woman to whom I have already referred. Some three years ago the following interesting case occurred in the Hospital. A young woman, æt. 19, had one day pain on swallowing, and the day afterwards brought up about half an ounce of bright blood. An œsophageal ulcer or œsophagitis was suggested as the cause. Once or more after this she vomited or "brought back" her food. Two days later she was taken with difficult breathing and collapse. She was almost pulseless, and some strychnia was injected subcutaneously. The pulse improved, but the difficult breathing continued, and the desirability of tracheotomy was considered. When I saw her three and a half hours after the commencement of the dyspnœa she was lying with her head thrown back, breathing with inspiratory stridor, of which it was difficult to say whether it was laryngeal or tracheal. The face was full-coloured, but not cyanosed. The pulse was 90, regular, medium volume, heart sounds normal, not much movement of the chest, the breath sounds at the apices faint. Every three minutes she would fix her chest, stop breathing, throw herself about as if in distress, and clutch at the clothes, or at persons present. This went on for fifteen to twenty seconds, then the air would be admitted again, and the stridor was resumed. There was no cough, and she spoke in a whisper. The attacks of apnœa were brought on when anyone touched her throat. A little chloroform was given, and she had an attack of apnœa under that, no less nor more than without it. But while this was being administered her behaviour was again suggestive of hysteria, and after a time the stridor was less noisy, and was followed by forced expiratory movements. Some loud talk about galvanic batteries probably helped to restore her to normal condition, and she got quite well.

The term "cardiac apnœa" has long been in use to express the kind of distress which is often present in advanced cases of heart disease. This is not the shortness of breath of the early stage, nor the dyspnœa which would be due to cyanotic induration of the lungs; or an associated pleural effusion, in which occur the frequent respirations which we have already discussed. But in the condition of heart known as *asystole*, where the cardiac contractions are feeble, the pulse is small, weak, irregular, and the patient is obliged constantly to sit up, there is often a form of dyspnœa, in which deep sighing breaths are taken, apparently with effort, the patient throwing himself about, and even gasping for air in a most distressing way. This appears to be due to the failure of the heart to supply blood to the lungs, rather than to any failure of the lungs to obtain air for the blood.

I now have to speak rather briefly of some forms of altered breathing, where the heart and lungs may be perfect, or at any rate not responsible for the symptom, and where there is no fever such as would explain some of the forms of dyspnœa we have spoken of.

Cheyne-Stokes breathing—This is now sufficiently familiar to all of us. It is that form of breathing in which periods of full deep respirations alternate with periods of shallow breathing, so shallow that ultimately the breathing stops for a few seconds, a real apnœa.

Time does not allow me to speak of all the characteristics of this curious phenomenon; it may be sufficient to remind you that the respiratory movements beginning again after the few seconds of apnœa, gradually get deeper and deeper until they reach a climax, and then gradually get shallower and shallower until the period of quiet or cessation is reached; that a series from apnœa to apnœa may occupy from thirty to forty seconds, and that the number of respirations in that time may be from twenty to thirty; that during the quieter half the patient may be drowsy, and the pupil often contracts; and that during the more active half he is often excited and throws himself about and the pupils dilate. But considerable differences of detail occur in different cases. It was first described in connection with diseases of the heart and aorta; but it is now known to occur in many cerebral cases, such as hemiplegia, meningitis and tumour of the brain, and in toxic conditions, such as Bright's disease, and some allied conditions. A mild form of it occasionally occurs in healthy people when asleep. It has often been regarded as necessitating a bad prognosis; but although it no doubt occurs for the most part in conditions which are irrecoverable, it is not of itself necessarily the immediate precursor of death, and may continue, as in some cases of aortic disease and hemiplegia, for years before that event takes place.

There is yet another form of dyspnœa which is undoubtedly due to a toxic cause, and that is the form of breathing which sometimes accompanies the fatal course of diabetes. The name *air-hunger* has been given to it; but it does not seem to me to be a very satisfactory name, and it certainly may mislead one, if he has not seen a case, or has not read a full description of it. A candidate at an examination said that in this complaint the patient suddenly started up and gasped for air; but the condition develops slowly, persists continuously, and the patient is too drowsy or prostrate to think of any sudden movement. The feature about the breathing is that the respiratory movements are very extensive, that inspiration is deep and long, and expiration equally extensive, and, as might be expected, this movement is accompanied by a slight noise audible close to the patient, similar to that which occurs when one pants after running The air enters freely into the chest, there is no obstruction, and no pronounced cyanosis. But as the patient's circulation is generally very feeble at the same time, there is frequently a slight duskiness of the countenance. The frequency of respiration is only slightly greater than the normal. There is a certain similarity between this diabetic breathing and the excited phase of Cheyne-Stokes breathing. I do not need to discuss the pathology of the dyspnœa of diabetes: the coma is undoubtedly due to some poison formed in the body, and at present this is thought to be β-oxybutyric acid. The dyspnœa is probably due to the same or to some substance associated with it.

My last observation in connection with disturbances of the respiration will be this, to remind you that in some cases of cerebral tumour, death takes place by a sudden, quite unexpected, cessation of the respiratory function; the pulse continues to beat for some seconds, but the respiration failing to be resumed, the pulse ceases, and death is the result.

Some influence of the tumour upon the respiratory centre is no doubt responsible for this event.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The New "Guyoscope."

DEAR SIR,—May I so far trespass on your valuable space as to indulge in an expression of opinion? It is only the knowledge that there are many others who think as I do that leads me to thus air my own personal views. Since you, sir, apparently intend to refrain from publishing a deliberate official criticism of your ambitious little contemporary, may an occasional correspondent be permitted to run a free lance's risk of the disapproval of your readers?

The second number of the new "Guyoscope" showed many signs of irritation on the part of at least one member of its staff, at the scant appreciation it received at your hands. The writer of "Scopes," after an eventful Christmastime, can find nothing better to do than spend three-quarters of what should be valuable space in justifying his paper's existence in your eyes. A poor compliment, sir, to his fellow-writers, but no mean tribute to yourself! Many will notice with amusement this writer's mention of his "pardonable pride" on receiving "cordial letters from past and present members of the Hospital Staff." Apparently this is written in dead earnest! I thought the proudest boast of the old "Guyoscope" was its independence of the likes and dislikes of the staff. Apparently, sir, they do, however, really desire their paper to be written by the students for the staff, and are as anxious to propitiate Cerebus as they imagine you to be.

"Scopes," therefore, are mainly apologetics. The description of the Nurses' Concert misses being funny because it is so obviously forced. The article on the Residents' Theatricals shows the unmistakable cloven hoof of spite, especially where A. B. W. deals with the third play—not, however, where he criticises the plot adversely, that he has a perfect right to do (especially with those magic initials); of the truth of his remarks none are more acutely conscious than the authors. One is tempted to believe that the eulogistic reference to the old "Guyoscope" and the omission of any mention of the new, may have nettled the editor and his colleagues. And so on through this number. "Round the Fireplace," a real pièce de resistance in the first issue, because the principal jests had already done yeoman service, fails to do more than raise the tardy smile this time. Surely such an ordinary exploit on behalf of the R. M. O. B. is scarcely worth four lines of verse. The Office Boy once more gives a badly-written account of what really happened—without any obvious attempt at humour. "Gladys" this time flies to the other extreme, avoiding vulgarity, but again missing humour.

What of the really good things? "The Trio" is a very smart piece of versifying—not *poetry*, as styled on the list of contents—poetry is a thing apart. Why do they tend to depreciate a really witty rhyme by calling it poetry? The idea of the caricature "Eric" is quite funny, perhaps the execution is not as good as it might be. The Auction Advertisement is really worthy of the paper in its best days. "The Boro' Ladies" is a good parody—the human touch early in the second verse will fetch everyone who has been on the district. "How unkind" sums up the situation very neatly—the child, perhaps, might have been less healthy-looking.

Whatever they may say, there can be no doubt that the adoption of the title of "Guyoscope" is a mistake. The approbation of a past editor has nothing to do with it, nor has the support of Mr. Stanley Cock, whose talent, unfortunately for the present "Guyoscope," seems to be under a cloud (Teddy isn't a Jew, Mr. Cock). "It is the spirit that quickeneth," and if every past member of the "Guyoscope" staff had written to the present officials imploring them to adopt the old title and headlines, it would still remain an error of the first magnitude for them to do so. And why? Because the moving spirits of the present staff cannot hold a candle to the old gang in any way—nor for that matter can any of the known writing men in the Hospital. This present staff have neither the wit, resource, variety, judgment, nor, I fear, good taste of the men who principally helped to make the old magazine famous, and their jokes are apt to be (caviare to the general if you like, sir), but I prefer to call them cryptic failures.

But since a comparison with old times is so fatal—and surely in their wildest moments they could not have imagined it would be anything else—how much better had they refrained from using the old title, &c., and, instead, made use of one of their own choosing. They would then have been judged on their own merits, not from any impossible standard, and they would not have started heavily handicapped by the responsibilities of a great reputation.

They will probably run to their time limit of six months, and I for one hope they will run for longer, as there is always the hope that among the junior men there are those more fitted by nature and grace to wield deftly the witty pen with which they have up to the present only fumbled. Till these young Davids are forthcoming, however, it may safely be said that the present staff will not ingratiate themselves with their readers by anything that falls below the level of legitimate and sportsmanlike raillery.—I am, Sir, yours truly, RAY EDRIDGE.

Papers by Guy's Men.

A Lecture on some of the Clinical Aspects of Pneumonia. By Donald W. C. Hood, C.V.O., M.D. Cantab., F.R.C.P. Lond.—*The Lancet*, December 30th, 1905.

The Treatment of Uric Acid. By James F. Goodhart, M.D., LL.D., F.R.C.P. Lond.—*The Practitioner* for January, 1906.

Song of "The Scrubber."

The Nurses' Home, Friday, December 29th, 1905.

They say I am only a scrubber,
And in Esther ward I'm seen,
It's easy to find if you'll please bear in mind
That it lies between Mary and Queen.
The floor is rather uneven,
But it's white as the lilies of France;
If you'll hand me my broom,
I'll just waltz round the room
And recite a few facts as I dance.

They say that my life is a hard one,
And scrubbing is wearing, I ween,
But this is my plan, I bow down to no man,
But of Esther ward I'm Queen.
You will wonder I don't have rheumatics,
Housemaids' knee or the Flue and all that,
But for fear I should sneeze
Thro' the damp to my knees,
I just kneel on a brown paper mat.*

Now of course it's a fact so much worry,
Now and then makes a body feel ill,
But when I feel seedy, my action is speedy,
I pop into bed and rule still.
I quietly get myself warded,
It's not such a bad bit of fun,
When they think I'm just sleeping
A close watch I'm keeping,
And I tell them how things should be done.

There's scarcely a man in the College,
But knows that I'm boss over here,
When I tell them to get their feet out of the wet
They probably reckon I'm queer.
I know that I worry the nurses,
Who frequently say I'm a bore,
But I really don't see
Why Ward Clerk or H.-P.
Should walk on my newly-scrubbed floor.

Now I know that the life of a scrubber,
Is not one of unceasing delight,
Still it might be much worse,
For I might be a nurse,
And kept running from morning till night.
For they mustn't be late for breakfast,
They mustn't be late for prayers, [the stairs.
They mustn't be late in going up or coming down
They mustn't be late for dinner, they mustn't be
So it's best to be only a scrubber, [late for tea.
And Queen of the ward like me.

*Mrs. B. now has a pillow instead of paper.

Notices.

AN Examination of Candidates for entry into the Medical Department of the Royal Navy will be held on the 5th February, and following days, at the Examination Hall, Thames Embankment.

Not more than ten Commissions will be offered.

All forms to be filled up by Candidates will be supplied on application to the Medical Director-General, Admiralty, 18, Victoria Street, S.W.

19th December, 1905.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

CHARLES MURCHISON SCHOLARSHIP IN CLINICAL MEDICINE.

The next examination for this Scholarship will be held at the Royal College of Physicians of London, on Monday, the 2nd day of April, 1906, and following days.

The Scholarship is open to any Student of Medicine who has been a registered Medical Student during a period of not less than five, and not more than seven years at a Hospital in London or Edinburgh, recognised by the Royal College of Physicians of London or by the Medical Faculty of the University of Edinburgh, and whether holding a Medical qualification or not.

The Examination will be conducted both orally and in writing, and will include—

(*a*) Examination of Patients, with reports on their cases.

(*b*) Questions on Pathology and Treatment, and

(*c*) Examination on Specimens.

The Scholarship is of the value of Twenty Guineas, and is tenable for one year.

Intending Candidates are required to send in their names to the Registrar of the Royal College of Physicians, Pall Mall East, London, not later than March 19th, with evidence of the duration of their Medical Studies from the Deans of their respective Schools.

(The Examination for 1907 will be held in the University of Edinburgh.)

EDWD. LIVEING, M.D., Registrar.

Pall Mall East, S.W.
January, 1906.

DIPLOMA IN PUBLIC HEALTH.

GUY'S HOSPITAL MEDICAL SCHOOL.

Special Classes in all the Subjects have now commenced:—

Hygiene.—J. F. J. Sykes, M.D., D.Sc., Medical Officer of Health for St. Pancras.

Bacteriology.—J. W. H. Eyre, Esq., M.D., M.S., F.R.S.E.

Chemistry.—W. C. Ball, Esq., M.A.

For further particulars as to times of Classes and inclusive fee apply to the Dean.

Guy's Hospital,
London Bridge, S.E.

Christmas Week.

Martha Christmas Tree.

This entertainment, probably one of the most enjoyable of the week, and one which amply repays those assisting for the slight amount of extra work, took place on Thursday afternoon at 3.30. For an hour before this time the children arrived in a continuous stream—some accompanied by Sisters, others carried by dressers or ward clerks—and were arranged in groups on the floor and on beds. Eighty-five were present at the commencement of the performance. The first item was an excellent Cinematograph display, with an interval half way through for tea. The subjects shown were chiefly amusing, those which created most merriment being "Little Tommy's Trousers" and "The Greedy Chickens," while "House on Fire" and "The Launch of the Lifeboat" caused much excitement. The pictures finished, and the Cinematograph having been removed, the Tree, in all its splendour, became visible, and evoked loud cheers, which increased with the entry of Father Christmas, attended by Mrs. Christmas and their boy. The last named was excellently performed by Mr. Dryland, who, in addition to playing the procession in, on a mouth organ and drum, added that touch of comicality to the proceedings which ensured their success. Three cheers having been given for Mrs. MacMillan, the kind donor of the tree every year, the presents were distributed with great rapidity, those for the members of the staff, nursing staff and firm, all being more or less apropos. We shall long remember Mr. Thompson's polite and gracious acceptance of a copy of "Much Ado about Nothing," and Mr. Fagge's beaming face as he gazed upon the smiling features of the chubby doll which fell to his lot. All the presents having been distributed, the proceedings terminated with three hearty cheers for Sister Martha and "God save the King."

Luke Concert.

The Luke concert was held on Friday, December 29th, at 3 o'clock. Owing to the kindness of Mr. Stanley Brett, who made himself responsible for the entire programme, and who redeemed his promise by bringing with him a whole host of famous people, the concert was an entire success. The colonnade and staircase were lined with posters setting forth the names of those who had come to help Mr. Stanley Brett, and the result was, as was expected, that the ward was filled from door to door long before it was time for the concert to begin.

The programme was opened with a most amusing song by that very self-possessed young gentlemen, Master Valchera, and this was followed by a most humorous sketch by Mr. Sam Walsh. Miss Madge Crichton sang twice, her first song, "My Girl Sal," especially being loudly applauded.

A hospital ward is possibly not the best place in the world in which to sing, but Mr. Courtice Pounds' magnificent voice was equal to the task of overcoming any difficulty. We had not heard before the new setting of "Mandalay," with which he opened. Miss Ethel Bryant, Miss Camille Clifford, and Mr. Harold Montague were other well-known people who had promised to help, and who did not fail us. Miss Bryant has a delightful voice, and made two appearances. Miss Camille Clifford sang charmingly, and Mr. Montague's sketch was irresistibly funny. Messrs. Wigley and Penny's duet, "Excelsior," was beautifully rendered, and a feature of the concert was Mrs. Sam Sothern's recitations. Finally, Mr. Stanley Brett sang a verse or two from two of the hits of "The Catch of the Season," "The Church Parade," and "The Quaint Old Bird," and sang them as only Stanley Brett can sing them, or shall we be accurate, and say as only Stanley Brett and Seymour Hicks can sing them.

Lazarus Concert.

It said much for the management of the Lazarus concert that they were able to attract such a crowd on Friday afternoon, at a time when Luke ward was offering such rival attractions over the way. Among the items of the programme none were more thoroughly appreciated than the little duologue given by Mr. Aubrey Smith and Miss Gertrude Burnett. This clever little sketch was, we believe, acted for the first time on this occasion, but a "call" for the author (who was present) did not succeed in drawing him.

Among the other artistes were Miss Mabel Nelson and Mr. E. Bryant Crampton, who each gave two songs. Mr. Hamilton Scott gave a sketch, in which he described a village concert—an idea which, if not exactly new, was at any rate very cleverly done, and provoked roars of laughter.

The orchestra from the Gustave Ernst Conservatoire of Music had no small share in the programme, and added much to the enjoyment of the concert.

The Nurses' Entertainment.

On Friday evening, December 29th, at 8 o'clock, the nurses held their annual entertainment. Unlike last year, when the performance took place in the drawing-room, this year a large stage had been erected at the further end of the dining-hall, an arrangement which was in every way an improvement. The audience had a better view, and there was far more room on the stage. Among those present were Mr. and Mrs. Cosmo Bonsor, Sir Cooper and Lady Perry, the Matron and several members of the staff. The Residents were again the guests of the nurses, and in close order, snpported by a detachment of Clinicals, A.H.S.'s and O.P.O.'s; made their annual descent upon the Nurses' Home, while lastly, besides these *ex officio* guests, mere representatives of office, were a chosen few who could claim that they owed their invitation to merit alone. Judging, probably correctly, that the Hospital had had its fill of the legitimate drama as presented in the court-room on the

three previous evenings, the nurses had decided upon a variety entertainment, a decision which must have entailed an enormous amount of time and trouble, but which was certainly justified by the result. An astonishingly varied programme was presented in two parts, the night nurses being responsible for the first, the day nurses for the second. Both were so enjoyable, and reached such a high level of excellence, that we can only suppose that the distribution of nurses for the past three months had been arranged by the Matron with the one object of securing an equable division of talent. A spirited duet by Nurses Clifford and Taylor on the piano was the first item on the programme, and this was followed by one of the most successful "turns" of the whole evening—three tableaux after Charles Dana Gilson. The last of the three, wherein "Ellen announces that she is engaged to be married," was greeted with tremendous applause. Other excellent tableaux followed, "Edward's Desiccated Soup," "Peter's Milk Chocolate," "O.M. Brass Polish," and finally, "At the Front," not a grand military display, but a most realistic picture of an assemblage of our good friends the ladies of the Boro', shepherded by Nurse Spiller herself. The toy symphony went without a hitch, and received a well-merited encore. Sister Cornelius' recitation, Bret Harte's "Poverty Flat," was much enjoyed, and the duologue, "Mrs. Green," was extremely clever. Finally, in the dancing of a Scotch reel, Nurse Wrenford and Nurse Bramley-Taylor proved conclusively that one does not need to be born in Scotland to foot it as well as Nurse Pagan and Nurse Edwards.

In the second part, the song "The Babes in the Wood" was delightfully rendered, and one of the hits of the evening was made by an original song, sung by Nurse Thompson, as a "Scrubber," with an attendant chorus of nurses. The words of the song are printed elsewhere. Every one appreciated the opportunity of hearing Nurse Woodward. Her violin solo was as charming as ever, and received its usual enthusiastic encore. A short one-act play, "Grizelda," was extremely amusing, relating the unsuccessful attempts of two charming old ladies to escape from the tyranny of their maid-servant, Grizelda. Unfortunately, the actors in the piece apparently preferred to remain incognito, so that we are still left in doubt whom to congratulate on the impersonation of Mr. Gustavus Pink. Finally, there were Mrs. Jarley's Waxworks, with Mrs. Jarley really admirably represented, while the Teddy Morgan figure, with his "hidentical cap and his hidentical jersey," bearing the "hidentical ball" in one hand and a colossal leek in the other, was forced, regardless of history, to score try after try against the discomfited "All Blacks."

After the entertainment the hall was cleared, and then and there took place the first dance in the Nursing Home at Guy's, and in this fitting and historic way a most enjoyable evening was brought to a close.

Astley Cooper Concert.

This was held on Dec. 30th. Of all the events of the week there is none which exemplifies more fully the spirit of the Guy's Christmas than Astley Concert, The music is always good, the decorations tasteful, refreshments lavish, and the audience packed and enthusiastic. Furthermore, there is no counter-attraction. This year all the traditions were well upheld by the promoters of the concert. Many of the old Guy's favourites appeared, and were aided by excellent outside talent. Everything went with a swing. To describe the items of the programme, piano solos were played by Miss Mason with good and sympathetic execution. Miss Kendall was unfortunately unable to appear. Mr. Nutman sang "A Tinker," and later the Cavalier song, "Marching Along." We were very fortunate with our comic singers, Messrs. Harrison and Colin Mackenzie, the former of whom gave his song "Laughs," and in the second half "A Serial Story," with "If You Only Knew" for an encore, meeting with loud applause; the latter first sang "Imitations," followed by "Oh, Lucky Jim," and later appeared with Miss Edith Howton in a duet, the well-known "Chick, Chick," from the "Country Girl," which was loudly encored. A rendering of Gounod's "Meditation," which was much appreciated, was given by a trio—'cello, violin and piano, played by Mr. Watt, Miss Bartram, and Mrs. Watt.

Mr. Chapple made a welcome appearance, singing "My Ain Folk," and on being recalled "Carolina," and in the second half "The Bird and the Rose," and "The Little Irish Girl."

Miss Norah Freeley gave with much skill and taste two violin solos, one of which was the popular Intermezzo from "Cavaliera Rusticana." Miss Edith Howton, in addition to her duet, sang, "There is a Lovely Garden," and Mr. Watt played a 'cello solo. Two breezy sea songs were given by Mr. Phillips, and a whistling solo, which also was encored, by Mr. Ransford. Mr. O. V. Payne gave us some of his old favourites, without which Astley concert would seem imperfect, and then Mr. Edridge brought the house down with his recitations, "Speakers in Hyde Park," and Gilbert's "Troubadour."

"God Save the King" and "Auld Lang Syne" followed, and to conclude the ward was cleared up in that amazing manner which makes the British Workman with the Pott's Fracture open his eyes. Christmas was over.

Papers by Guy's Men.

A Case of Carbon Monoxide Poisoning. By P. C. P. Ingram, M.R.C.S., L.R.C.P. Lond. — *The Lancet*, December 30th, 1905.

A Consideration of Median Hernia and its Operative Treatment. By Lawrie McGavin, F.R.C.S. Eng.—*The Clinical Journal*, December 20th, 1905.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twentieth List of Collections.

(Received up to Wednesday, January 10th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections.

Name.	Shillings.
Amount previously acknowledged ...	69,303
Bridges, Miss A.	2
"C. M."	10
Cameron, H. C. (205s.)—C. N. Dyer	20
Daucket, Miss L. E. (4s.)—Alfred Smart	1
Eastes, Thomas, F.R.C.S....	63
Hall, Miss J. (67s.)—Miss E. M. Fuller	10
Hanmer, Miss M. (50s.)—Miss Waterall	5
Lowenthal, Miss M.—Collection	60
Mullins, H. R. (40s.)—Referee	2
Pearson, Miss L. (76s.)—Mr. Pittman, 5; Mrs. Matthews, 3	8
Pollard, J. McF.—Anonymous	3
Pritchard, Miss E.	7
Reeves, Dr. Albert (1s.)—E. K. L., 3; W. W. Hyde, 1	4
Ruth, Sister—Collecting Box	18
Wells, Mrs. C. H. (675s.)—Miss White	40
Wilson, T. F.—T. W., 10; H. W., 2; A. V. F., 5; L. P., 5; J. G., 1; B. M. W., 5; Mrs. E. Walker, 1; Mrs. Howitt, 1	30
Wing, Dr. C. E. (6s.)—Miss M. K. Ridgers, 1; H. C. Travers Dade, 1; E. Ive, 1; Percy Merredew, 1; J. V. Ive, 1; Walter Ward, 1 ...	6
	69,592
Further collections from sources outside the Hospital	30
TOTAL (up to 10th inst.)	69,622

The Hospital Appeal.

Twentieth List of Donations.

	£	s.	d.
Amount previously announced ...	57,146	11	6
"Marnie"	1,000	0	0
	58,146	11	6
Further Amounts received (Including Contributions to Million Shilling Fund up to the 10th inst.)	17	0	0
Total Amount received towards the principal sum of £100,000 required ...	£58,163	11	6

Some Points in the Diagnosis of Urinary Disease.

A Paper read before the New Cross Medical Society on December 14th, 1905, by R. H. JOCELYN SWAN, M.S. Lond., F.R.C.S.

MR. CHAIRMAN AND GENTLEMEN,—I must first thank you most heartily for your invitation to appear before you this evening—an invitation which I accepted with some temerity—but when it was suggested to me that a few remarks upon the more recent work in urinary disease might prove acceptable to you, a great burden was lifted from my mind and relieved me of the necessity of casting about for a subject upon which to address you, for I thought I could put before you some facts which might serve to simplify the diagnosis in some of the more obscure cases of urinary disease. In the short time allotted to me this evening, I propose to deal only with the surgical aspect of the subject, and shall attempt to make my remarks more interesting by reference to clinical details of cases which have come under my own notice.

You will, I am sure, pardon my reminding you that the urinary organs comprise the kidneys, ureters, bladder and urethra, whilst the much-discussed prostate gland bears an important relation to the bladder and urethra. And here, at the onset, I would like to impress upon you the fact that disease of any one of these organs may produce changes in another, so that the symptoms of the primary lesion are often thrown into obscurity by the more pronounced symptoms due to secondary changes. Perhaps I can best illustrate this by a case which was recently sent to me by my friend, Dr. Bryant. A man, aged 46, had had intermittent hæmaturia for nine months, with the passage of small clots, accompanied by a dull, aching pain in the right loin and occasional attacks of severe pain simulating renal colic. He had had no increased frequency of micturition, but had been losing flesh somewhat rapidly. Upon examination, the right kidney was easily felt to be enlarged, tender and rounded. A diagnosis of probable renal growth was given, but upon further examination by means of the cystoscope, a small pedunculated villous tumour was found in the bladder, growing from the close vicinity of the ureteric orifice and obstructing the latter enough to cause hydronephrosis. The subsequent removal of the growth from the bladder relieved all his symptoms, and the kidney very quickly resumed its normal size. This case amply illustrates the fact that renal symptoms may be caused by a lesion in the bladder, and I feel sure that had not the cystoscope been here employed, the patient would have been submitted to a useless exploration of the kidney without the true cause of his trouble being ascertained. On the other hand, symptoms referable to the urinary bladder are frequently caused by renal disease, and all of you will probably recall some cases of this nature, such as when a patient comes complaining of frequency of micturition and pyuria, which is due to

the descending infection of the bladder from a renal pyelitis due to calculus. These instances are quite enough to emphasise the fact that our diagnosis cannot be formed upon the consideration of the more prominent symptom, but only after a full account has been obtained from the patient of the whole course of his trouble, and only after the most thorough examination of the whole urinary tract.

If you will allow me, I will spend a few moments to consider the symptoms given by a patient the subject of disease in some part of the urinary tract, which commonly include pain, hæmaturia, increased frequency and difficulty in micturition, and alterations in the flow and character of the urine. These are the points usually presented by the patient, but a very great deal can be learned by further inquiry into each of them First of all, take *pain*, which may be present with varying intensity either in the back, groin, over the sacral base, in the perineum, or in the glans penis. The patient who is habitually passing small calculi from his kidney down the ureter into the bladder, recalls that first the pain seized him in one side of the back, and will put his finger on a spot in the angle between the last rib and the outer margin of the erector spinæ muscle—the so-called renal angle—whilst, during the time the calculus is slowly making its way down the ureter, the pain becomes successively more intense along a line passing round the side above the iliac crest and in front of the anterior iliac spine to the external abdominal ring, when, after the lapse of a variable period, the stone is passed on into the bladder, and the pain suddenly leaves him, to reappear in the glans penis each time after micturition, until the offending calculus is voided per urethram or otherwise removed. This sequence of events in the position of the pain indicative of ureteric descent is not at all uncommon, and from it the position of the obstruction can be localised.

The pain, however, varies in character and in periodicity, from the dull aching, unilateral backache of a cortical stone or of other renal lesions, to the severe, acute attack of renal colic which accompanies the attempts made by the ureter to force along an obstructing stone. Exactly the same acute pain accompanies the descent of a blood-clot, so that the subsequent passage of a calculus or blood-clot in the urine is an event of importance in these cases. On the other hand, acute pain in the renal angle shooting down to the groin and thigh may occur without the passage of either blood-clot or stone, and may be due to the fact that a calculus, too large to pass down the ureter, has engaged the renal pelvis; or, apart from these, may be due to the so-called Deitl's crisis in a movable kidney, probably from some kinking of the ureter in association with the abnormal mobility of the organ.

Pain in the lumbar region is, however, complained of in a number of instances of urinary disease quite apart from lesions of the renal tissue. Any trouble in the lower urinary passages giving rise to obstruction to the normal flow of urine, whether in the bladder or urethra, or a secondary infection of the lining membrane of the ureter and renal pelvis by pyogenic organisms from the bladder, will cause an ill-defined aching in the lumbar region. This same indefinite aching in the back and groins may also be due to abnormal conditions of the urine, without any gross lesion of the kidney, and frequently come under the notice of physicians. I allude to patients who pass an excess of either oxalates or phosphates in the urine, acid in the former, but alkaline in the latter, but whose symptoms will be entirely cleared up by proper attention to the intake of fluid and diet, aided by the exhibition of appropriate drugs in the two conditions. In these patients the aching is bilateral, but occasionally more marked on one or other side. In this connection I might mention two cases which have come under my notice during the last year. Both were young men complaining of fixed unilateral renal pain and frequency of micturition, and both had been advised an operation on the kidney to remove a suspected stone, although radiography had been entirely negative. In both the urine was alkaline, contained a large excess of phosphates, but no albumen nor blood. By appropriate drug treatment to render the urine acid, the lumbar pain entirely disappeared, and both patients were quickly well without any operation.

Another common seat of pain is over the base of the sacrum, and in my experience the two common causes of this symptom are malignant disease of the bladder and enlargement of the prostate. I do not wish to convey the impression that this aching sacral pain is due to any nerve pressure by these tumours, for I am sure that this is not the case, but that it can be classed as a referred pain due to changes in the bladder base. Pain due to pressure upon the nerves in the pelvis by secondary malignant glands is felt in the thigh, usually in the course of the sciatic nerve. Carcinomatous glands in the pelvis may be due to primary disease in the bladder or prostate. I would here like to call your attention to the fact that carcinoma of the prostate is very far from the rarity that surgical text-books would lead one to think, and I hope to speak of this again later in my remarks upon physical examination.

Perineal and penile pains are symptoms often presented by the patient, and we are always taught, and retain as an axiom, that pain in the glans penis following micturition is pathognomonic of vesical calculus. This, unfortunately, is far from the case, and our diagnoses are not so easily reached; when a number of urinary cases are seen, we soon find that this dictum is in fault. The pain in a case of vesical calculus is due to the contact of the bladder wall with the stone as the viscus empties, but any cause producing an ulcerated surface of the bladder mucous membrane gives an exactly similar pain in the glans penis following urination, and this symptom is almost constant with tuberculous cystitis, and is frequent with a vesical epithelioma.

Hæmaturia is another symptom prominent in urinary disease, and may in fact be the only symptom attracting the patient's attention. The hæmaturia may be profuse

or slight, and may occur intimately mixed with the urine, or as a few drops at the end of micturition. Frequently important evidence of the seat of the hæmaturia can be gleaned, in the absence of other symptoms, from the shape of any clots which may be passed. These should be floated out in a large basin of water, when some may be found of pyramidal shape, from their formation in the calyces of the renal pelvis, or others worm-like with tapering decolourised ends, indicating their formation in the ureter. Profuse bleeding accompanied by these clots is almost always indicative of renal growth, whereas profuse hæmaturia from a vesicle lesion gives rise to flat pancake-like clots, which may become broken up in their passage through the urethra. That hæmaturia should follow an attack of renal pain would be expected, but it is not always due to a renal stone, for the mere passage of a clot down the ureter gives pain indistinguishable from that of renal colic, as is well exemplified by a case that occurred under the care of Mr. Pardoe. A man, aged fifty-three, was seized with sudden, acute pain in the right side of his back, at first remaining fixed in the loin, and of a "tearing" sensation, causing sweating and retching. Three attacks of this nature occurred in as many months, and then a severe attack in which the pain passed into the groin and testicle, and was followed in a short time by the passage of blood, containing worm-like clots per urethram. Upon examination, we were unable to feel the kidney, although by the cystoscope we were able to see blood issuing from the right ureteric orifice. Exploration of the kidney revealed a carcinoma of the upper pole, which had involved the renal pelvis; the organ was removed. The patient remained perfectly well for nearly two years, but I have recently heard that he has developed a large subphrenic mass of recurrent growth. These cases of profuse hæmaturia, with and without pain or other symptom to point to its origin, are, however, less common than those presenting only a small amount of blood in the urine, and here it is important to ascertain the relation of the blood to the urine during micturition, *i.e.*, whether mixed together throughout the act or at the termination. A few drops of blood accompanying the last few drops of urine is often thought to be due to vesical calculus, but let me give you an important clinical fact, that vesical tubercle and vesical growth may give rise to exactly the same symptom, which may be made worse by searching the interior of the bladder with a sound. Here, again, the diagnosis must be made by a consideration of the whole of the symptoms rather than by this one alone. I might mention here that profuse hæmaturia is not an uncommon symptom in patients the subject of prostatic adenomata.

Increased frequency of micturition may occur from a variety of causes, and is usually looked upon as dependent upon some vesical lesion. This certainly is true in the very large number of cases, and is due to some form of cystitis or vesical growth, but we frequently find cases of increased frequency due to renal troubles or to enlargement of the prostate. I would like to make a special point here with regard to prostatic trouble and emphasise the fact that the first symptom of enlargement of the prostate is *not* difficulty in micturition, but increased frequency. The bladder does not become completely emptied on urination, and the addition of a comparatively small amount of urine to that remaining is enough to start the reflex act. Perhaps a more likely theory of the increased frequency with prostatic enlargement is that the mucous membrane lining the prostatic urethra is gradually pushed up into the bladder by the enlarging organ, and so stretched out over the latter that it comes to form a ring around the internal urethral orifice, and the contact of this urethral mucous membrane with urine sets up the desire to micturate. It may be taken as a general axiom that an elderly patient who commences his trouble with frequency of micturition is suffering from prostatic enlargement, whilst early difficulty in micturition points to a urethral stricture.

Of course, a large number of cases are troubled with frequency of micturition from causes secondary to their initial disease, as, for instance, when due to cystitis accompanying vesical calculus or growth or descending via the ureter from a renal pyelitis, and it is always necessary to differentiate the primary from the secondary lesion.

One of the most important guides to the surgeon is the relative frequency of micturition during active movements and repose, and in investigating a case it is always necessary to ascertain whether this symptom occurs during the night as well as during the day. If it only occurs during the day, and if it is especially marked during any movement, as exercise, suspicion is at once aroused of vesical calculus; but should the symptom persist throughout the night, although usually less marked, it is probably due to some form of cystitis or to prostatic enlargement. This is an important factor, and in a young subject is a very frequent symptom of tuberculous cystitis.

Difficulty in micturition and forced efforts to pass urine are common results of obstruction in the lower urinary passages, usually from urethral stricture, and as a late symptom of prostatic enlargement. Difficulty coming on suddenly without any previous symptom sometimes occurs from an enlarged prostate, but is more often due to some impaction in the urethra, such as a small stone descending from the bladder or prostate. However, cases remain in which difficulty in micturition does not depend upon any urethral lesion, and in which a full-size catheter can be easily passed into the bladder; in these cases the surgeon should always examine the knee-jerks. In hospital practice I have seen several cases sent up as suffering from stricture in whom an endoscopic examination has revealed a normal urethra, and have found the patient to be suffering from early locomotor ataxia, or some other spinal cord lesion. These cases are by no means uncommon, and I now make it an invariable rule to test the patellar reflex in all cases of difficulty in micturition. There is, I find, a false impression in the minds of many as to the significance

of twisted and forked streams of urine from the urethra during micturition, and the symptom is often said to be significant of stricture of the urethra, apart form the difficulty and increased expulsive efforts during the act. Now, the great majority of strictures occur in the bulbous urethra, and the mechanical effect on the stream of urine is that it loses its *force* in passing from a relatively narrowed tube to a wider one beyond, and the stream is *slowed* rather than thinned or twisted. For the stream to become altered in form requires a stricture in the terminal portion of the urethra, and this is comparatively uncommon. Alteration in the force of a stream of urine is an important symptom, but little weight can be attached to the complaint of a twisted stream.

I have so far restricted myself purely to cases of urinary disease, but all of you will recall cases presenting some of the above symptoms which are due to other causes, and I have only to mention some of these to remind you that each symptom may occur from lesions quite apart from the urinary organs. The difficulty of micturition as an early symptom of locomotor ataxia I have mentioned above. The frequency of micturition in women due to the intrapelvic pressure of a fibroid or ovarian cyst, or in the implication of the bladder in uterine cancer, or in either sex from diabetes from the large amount of fluid excreted; the complete retention of urine in women from the drag on the urethra of a retroverted gravid uterus, has been responsible for many errors in diagnosis, whilst I recently saw a case of severe hæmaturia in a child the subject of scurvy rickets. It may seem presumptuous on my part to remind you that the complications of an acute urethritis may give rise to difficulty and frequency of micturition from posterior urethral infection, to pain, and even to hæmaturia from acute cystitis, but my excuse must lie in the fact that I have seen several such cases sent to hospital for a diagnosis.

And now, having remarked in perhaps a somewhat cursory manner on the individual symptoms, I wish to spend a few moments in the consideration of two or more symptoms which, occurring in the same patient, may help in arriving at a diagnosis. Frequency of micturition is the most common symptom in urinary disease, and I pointed out previously how important it was to first ascertain whether the symptom persisted during rest as well as during active movements. The combination of frequency and pain is an important one, and may be met with in various degrees. Pain may precede micturition in cystitis of an acute form or in a bladder the seat of ulceration from a comparatively small amount of distension, and is felt in the hypogastrium, or may follow micturition in cases of vesical calculus or tuberculous disease, when it is described as a sharp, pricking pain in the gland penis. The combination of pain and frequency may, however, occur in other conditions, the best known of which is that accompanying renal colic, the muscular attempts of the ureter to expel any foreign body producing a reflex irritability of the bladder, with the co-existence of lumbar pain and frequent attempts to urinate. A clinical point of some importance may be mentioned in this connection in cases of a descending renal stone. Calculi may pass down the ureter, but may be too large to traverse the last inch of the duct, and becoming impacted, give rise to pain in the iliac region and back, together with frequency of micturition. Frequency of micturition with sacral pain always suggests prostatic obstruction, whilst frequency with pain along the sciatic nerves rather points to malignant disease with secondarily enlarged pelvic glands.

The relation of hæmaturia to pain may often form an important guide in diagnosis. Hæmaturia from some form of renal disease is almost always preceded by aching in one loin, the patient experiencing more or less severe pain in the back, and being surprised to find at the next act of micturition that the urine contains blood. Profuse hæmaturia of this nature suggests a renal growth, whereas the hæmaturia of a renal stone is usually scanty. The appearance of a few drops of blood at the termination of micturition, with penile pain, is usually looked upon as diagnostic of vesical calculus, but it is equally common with vesical tuberculosis, and since the South African War a good many patients have come under notice with these symptoms, due to Bilharzia disease.

And now a few words on the physical examination of the patient. Probably a very shrewd opinion had already been gained of the patient's trouble by a due consideration of his story, but so often do we find in urinary surgery that errors occur in localising the primary seat of disease, that all the urinary organs must be systematically examined before a definite diagnosis can be made, without which the question of treatment cannot be entertained. Although one's attention may be strongly attracted to the kidneys or bladder, all the organs should be examined, and we have not completed this until a rectal examination is made, often until a catheter has been passed, and sometimes until the interior of the bladder has been actually inspected with the aid of a cystoscope. This latter proceeding is, I am afraid, out of the hands of the busy practitioner, but I will refer to it again later.

With regard to the examination of the kidneys, palpation should first be practised in the dorsal posture, the patient being directed to draw the knees up and to breathe deep and long breaths. Firm pressure should be maintained with one hand in the loin, in the renal angle, and the other immediately below the costal margin in front, any enlargement or undue tenderness being noted, and the two sides compared. A manœuvre bearing the name of Jordan-Lloyd's sign—in which, if the hand on the abdomen is several times quickly depressed, a patient the subject of renal calculus will experience shooting pain in the back—has not met with much success in my hands in a good number of cases in which I have tried it, but by careful palpation I have more than once been able to actually feel a calculus in the lower pole of a kidney,

and in one case could feel one stone crepitating upon another. In cases of nephrotosis it is often useful to examine the patient in the knee-elbow position, when a movable kidney often becomes more easily palpable. I shall not enter into the long question of the diagnosis of a renal tumour from other abdominal swellings, other than to say that the bimanual feel of an enlarged kidney is the most distinctive, but I will give you a clinical point that I have noted in right-sided nephric or perinephric tumours, that the liver may be pushed down below the costal margin and that pain may be elicited upon slight pressure being made upon it. Assistance in the diagnosis of renal cases may sometimes be derived by the employment of X-rays, if a definite shadow be obtained, but I regard a negative report from the radiographer of little value, owing to the varying density of some forms of calculus. A tuberculous or pyonephrotic kidney also gives a faintly increased shadow to the X-rays.

It is often necessary to gain a knowledge of the condition of the ureters, as for instance in the determination of the spread of tuberculous disease. In a thin subject the ureters can sometimes be felt, if enlarged, as they cross the pelvic brim, but the lower ends can be much more satisfactorily palpated from the rectum or vagina, and I may as well here as elsewhere impress upon you the importance of a rectal examination. By this means, in the male, not only can the prostate be examined for any enlargement or tuberculous nodule, but the vesicles, bladder base and lower ends of the ureters can be in most cases palpated. To reach the latter, the examination should be made in the knee-elbow position, which gives much greater freedom to the finger, or if the patient is under an anæsthetic, suprapubic pressure with the other hand will bring these organs into reach. At the same time any enlargement of the pelvic lymphatic glands or thickening in the lymphatic tract should be sought for in any case suggestive of malignant disease. So important is this rectal examination that I would spend longer time upon it, but let me briefly give you a few instances in which you will find it very useful. A young man comes up complaining of pain in the glans penis following micturition, increased frequency of urination and the occasional appearance of blood in the urine—that is, that he complains of symptoms which might equally well do for vesical calculus or tuberculosis. No evidence can be found of tubercle in his testes, lungs or other organs, and in suspecting tubercle, we know that his symptoms would be aggravated by sounding the bladder. Now a rectal examination will in a number of these cases prove the existence of a nodule in the prostate or vesicula seminalis, and the diagnosis of vesicle tubercle is confirmed, whilst any undue thickening of the lower end of the ureter would show the latter to be already infected. Take again a more elderly patient complaining of increased frequency of micturition with sacral aching and perhaps occasional hæmaturia. A rectal examination may determine an enlarged prostate, or failing this a thickening of the bladder base due to carcinomatous infiltration, whilst the position of this in close proximity to or involving the ureteric orifice, would explain any symptoms referable to one or other kidney from backward pressure. Other conditions will readily be recalled by all of us, but two cases always come to my mind—both cases of calculus in the lower end of the ureter which could be felt per rectum—one of which had already had the kidney explored and in the other the appendix had been removed for supposed appendical colic without any amelioration of the patient's symptoms. Whilst speaking of rectal examination, I might mention another clinical fact to you, namely, the ease with which an enlarged prostate can be felt bimanually with the other hand above the pubes. In recent years, since Mr. Freyer's excellent work has brought the prostate under the domain of operative surgeons, we have learnt many clinical facts about this organ which had previously passed unnoticed; firstly, that a patient may present marked symptoms of prostatic obstruction without the gland being much enlarged into the rectum, but where the adenomatous growth has formed an intravesical projection which can be readily felt bimanually, and secondly, and by no means the least important, that carcinoma of the prostate is not the rarity that was formerly supposed; irregular enlargement, areas of increased density and fixity of the gland to the surrounding tissues are all points suspicious of malignant disease.

Physical examination of the bladder, apart from that by the rectum or by instrumentation, is practically limited to the palpation of a distended bladder, which gradually rises above the pubes. Occasionally I have felt a distended bladder to one side of the median line of the body, but it is unusual. An abnormal vesical distension may arise from some obstruction in the lower passages, or be due to some lesion of the nervous mechanism, and may reach a large degree. I well remember the case of a woman with acute retention from the retroversion of a gravid uterus, in whom the urine drawn off amounted to 172 ounces, but this must be exceptional. A word of warning may be added here, which I have never found alluded to in any text-book, but which is one of vast clinical importance; it is *never to completely empty an abnormally distended bladder.* Most of these cases occur in patients the subject of some chronic urinary obstruction, in whom backward pressure from the bladder has already injured the kidneys; with the onset of acute retention, the pressure in the renal pelvis is much increased and the sudden lowering of this tension by emptying the bladder produces a rapid congestion of the kidneys, and frequently death from uræmia within forty-eight hours. The obvious thing seems to be to relieve a patient with acute retention, but the more gradually it is done, the better for his safety. In the case of a man with prostatic enlargement, pass a catheter—No. 1 or 2 of the English scale—and let the urine flow drop by drop, or if a larger catheter be used, draw off about about 20 ounces, and replace it by 10 ounces of boracic lotion thrown into the bladder, repeating the procedure at intervals of about an hour. In the acute retention of a stricture, it is better to pass, if

possible, the finest filiform guide and tie it in, when the urine will gradually dribble away at the side of the guide, and the stricture can afterwards be divided with safety. At the expense of appearing dogmatic, I would ask you to bear this point well in mind in dealing with a case of vesical distension, and thus be saved the mortification of losing a patient when his trouble has been apparently relieved.

I am afraid this digression has taken me off my line, but there are a few points in the examination of the urethra which I would like to mention, and as this must form a prelude to any instrumentation of the bladder, I can speak of the two together. Occasionally a stricture in the penile urethra can be felt from the surface, but for most purposes it is necessary to pass some instrument into the canal. For this purpose the urethra should always be previously washed out with some boracic lotion, and it is a very useful adjunct to pass a few minims of a 5 per cent. sulution of cocaine into the urethra to prevent any pain to the patient. Needless to say, all instrumentation should be done under aseptic precautions, and it is always well to pass a soft gum-elastic bougie, size about 20 French, if any urethral contraction is suspected, and should this fail to pass, smaller sizes can be successively tried. It is a great mistake to commcence with a small bougie or a steel sound, as one may be greatly misled if it fails to pass readily. Much better than this, however, is to examine the urethra under direct observation by an endoscope, when by distending the canal with air, each part down to the membranous urethra can be easily inspected, any contracture or abnormality directly ascertained, and the approximate size of any stricture present noted.

The urethra being found of normal calibre, examination of the bladder by instrumentation can be undertaken. The passage of a catheter may be required to obtain a sterile specimen of urine for bacteriological purposes, or merely to ascertain the existence and amount of any residual urine in a case of prostatic obstruction. In a suspected case of this trouble the amount of residual urine should always be known, for with the progressive advance of the disease the quantity increases. To test this, always get the patient to pass his urine standing before you, when first of all the character of the stream and the hesitation with which it is commenced can be noted, and then pass the catheter with the patient lying down. A flexible Coudé catheter is the best in these cases, accommodating itself better to the altered urethra. In sounding the bladder in a case of suspected stone, a catheter should first be passed and the bladder emptied. A small known quantity of boracic solution—say three ounces—is then thrown into the bladder, and the pelvis raised by means of a small pillow. The catheter is removed, the sound introduced and the bladder systematically examined. Personally, I very seldom use a sound, but prefer to use a cystoscope, when a small stone, so easily missed with a sound, can be readily seen, or any other pathological condition ascertained. Further than this, the symptoms of calculus are so mimicked by vesical tubercle, that one instrumentation by the cystoscope will suffice, whilst a sound in a tuberculous bladder is apt to cause harmful results.

Before completing the physical examination, always examine the testes and epididymes for any nodules which may give a clue to a tuberculous lesion elsewhere, for the combination of vesical and genital tubercle is common, but at the same time be on guard against mistaking a nodule in the epididymis due to past gonorrhœal epididymitis for one due to tubercle.

Finally, gentlemen, a few points upon the examination of the urine. I am sure it is unnecessary for me to tell you anything about the ordinary tests for albumen, phosphates, blood, etc., and I have incidentally spoken previously of some points learned from the examination of any clots; but I might mention one or two details from which information may be derived. One form of urine I have found often puzzles students, and is one of pale colour, acid, low specific gravity, with a peculiar opalescent, sheeny appearance, and often with a peculiar penetrating smell. It contains a small amount of albumen, sometimes a little blood and pus, and is due to bacteria. It is the common type of urine seen in pyelitis, in tuberculosis of the urinary organs, and, in fact, any urine containing an amount of organisms. The microscopic examination of any urinary sediment should not be omitted, and a search made for any characteristic epithelial cells from the urinary tract, pus, blood corpuscles and urinary crystals, and to illustrate this I might give you a case in point now under my treatment. I was asked to see a lady of twenty-five, suffering from indefinite lumbar aching, particularly on the right side, and with increased frequency of micturition. She had had her appendix removed three years ago without relief, and had been treated for some time for ovaritis. I could find no renal nor vesical disease, but found her urine of high specific gravity, free from albumen or pus, but loaded with oxalate crystals. Examination of daily samples remained the same until I persuaded her to drink large quantities of fluid, when her pain absolutely disappeared, and the urine no longer deposited crystals. I think her trouble wholly depended upon the passage of these crystals along the ureter. Then, again, examine any pieces of solid material which may be passed in the urine, for it is no uncommon event for a patient to tell us he has passed some small stones, when upon examination they prove to be the conical phosphatic caps which form on a vesical growth in an alkaline urine.

And now, gentlemen, if I have not already occupied too much of your time, I would like to tell you of the more special instruments used in urinary diagnosis—namely, the cystoscope and the separator. I have so far but briefly mentioned either, as their use can but remain, at present at all events, in the hands of a few. The form of this cystoscope is probably known to all of you. (Nitze's.) Unfortunately, the early instruments were far from satisfactory, and it has most undeservedly been

looked upon more as a surgical toy than an assistance, in a great part owing, I think, to the inability of most surgeons to use it sufficiently often to gain an accurate knowledge of the appearances shown by it. To my mind, and I have had a fairly extensive experience of it, there is no more valuable instrument in the armamentarium of a surgeon, but, just like any other special instrument, an experience of a large number of cases must be obtained before one is able to appreciate the fine changes to give a definite opinion upon what is seen. Even the appearances in a normal bladder will differ with the amount of distension of the latter, and whilst the coarser lesions can be readily seen, it is difficult to be dogmatic upon the finer lesions, such as tubercle, or to give an opinion upon renal disease from the appearance of the ureteric orifices without a fairly large experience with the cystoscope. The bladder must be thoroughly washed out until the boracic lotion returns perfectly clear, and distended to that amount which the patient can comfortably hold (previously ascertained). The cystoscope is gently passed into the bladder and the whole surface inspected; the ureteric orifices are easily brought into view and the appearance on both sides compared, whilst the character of the urine and the manner in which it is ejected from each orifice is easily seen. Normally the urine is passed into the bladder in rhythmic jets from each orifice, a wave of peristalsis passing down the ureter, and the clear urine can be seen to mix with the medium in the bladder in the wavy lines seen when glycerine is mixed with water. Urine containing pus or blood from the kidney in even a small quantity is easily detected and the side of the lesion thus accurately ascertained. The presence or not of a vesical calculus, growth or prostatic enlargement can be most definitely ascertained. It has been said by eminent writers that the instrument is useless in cases of vesical growth, owing to the readiness with which bleeding is set up, but this in the great majority of cases can be prevented by careful manipulation or by irrigation of the bladder with an astringent such as Ag. No_3 1 : 5000. Perhaps I can most easily demonstrate the use of the instrument by giving you a few details of some cases which have occurred under my notice in which the cystoscope was of the utmost value in pointing out the lesion when all other methods had failed, and where, by its use, appropriate treatment could be effected:—

CASE 1.—G. N., æt. 46, was seen in private with Dr. Bryant and Dr. Ingram. Had had several attacks of profuse hæmaturia and aching pain in right loin, and occasional attacks of more severe pain similating renal colic. No increased frequency of micturition. On examination, the right kidney easily palpable, enlarged and tender. Left kidney not felt. Per rectum the prostate was found normal, but the right ureter could be felt dilated. On cystoscopic examination, a villous papilloma was seen arising from the right side of the interureteric bar, dragging upon the right ureteric orifice. The growth was removed by suprapubic cystotomy, and the kidney quickly regained its normal size. The operation was performed in July, 1904, and patient remains quite well. In this case the kidney was hydronephrotic from the obstruction to the ureteric orifice by the vesical growth.

CASE 2.—W. W., æt. 36, was seen with Dr. Bryant in Guy's Hospital in January, 1905. He was well until two months previously, when he found his urine loaded with blood. This had continued with varying intensity during the interval, but was unaccompanied by any pain or increased frequency of micturition. The hæmaturia was not lessened by rest nor drug treatment; the testicles and prostate were normal, but the left kidney could be felt on deep palpation. On cystoscopic examination, the bladder was found normal, but blood-stained fluid was seen emitted with large efflux from the left ureteric orifice. From the right orifice flowed clear urine. The patient was transferred under Mr. Golding-Bird, who removed a multiple cystic kidney, due to an abnormal ureter.

CASE 3.—J. P., æt. 54. For two years had had increased frequency of micturition, and on three occasions blood had been found in the urine. In September, 1903, he had complete retention, and was admitted to St. Mary's Hospital, where he remained for a month on complete catheter life. This he continued for four months, when he was admitted to St. Peter's Hospital, still unable to pass any urine voluntarily. The prostate could not be felt enlarged per rectum, nor was any infiltration of the bladder base noted. The urine was turbid, sp. gr. 1012, acid, pus and albumen present. On cystoscopy, a small, coarsely fimbriated papilloma was found springing from the bladder mucous membrane, immediately above the internal urethral orifice, blocking the canal and preventing normal micturition. The growth was removed by Mr. Freyer, and within a fortnight the patient was passing urine normally, and has continued to do so since. This patient had apparently been condemned to catheter life on the supposition that he had an intravesical prostatic enlargement. No cystoscopic examination had been made, and without this it would have been difficult to arrive at a correct diagnosis.

CASE 4.—Mrs. E. R., æt. 46. An abdominal tumour was present under the right costal margin in a very stout patient, but so much pain was caused by palpation that no satisfactory examination could be made. During the last two years she had had attacks of pain in the right hypochondriac and lumbar areas, and during the last two months the pain had been more acute, accompanied by the passage of chocolate-coloured urine. She had been jaundiced on two occasions, in one of which the jaundice and pain had been present at the same time. The tumour was rounded, reaching from the costal margin to the umbilical level, and moved with respiration. The percussion note over it was dull. Urine acid, 1018, albumen and pus present. No blood. Under an anæsthetic the tumour could be felt bimanually to be an enlarged kidney, and on cystoscopy, a small, conical, irregular calculus was seen projecting from the

right ureteric orifice. The left ureteric orifice was normal. The calculus could be felt per vaginam, and was manipulated into the bladder, from which it was removed, together with a large quantity of foul greenish pus. On again using the cystoscope, a jet of thick pus could be ejected from the right ureteric orifice by slight pressure on the kidney. The renal tumour became quite flaccid and collapsed. The bladder was washed out daily, and patient left a fortnight later, when the urine still contained a small amount of pus and the kidney was still just palpable. This patient did not present the usual symptoms given when a calculus is impacted in the terminal portion of the ureter, and it was difficult to determine the nature of the abdominal tumour until an anæsthetic was given. Had not the cystoscope been used and a nephrotomy been performed to drain the pyonephrotic kidney, a urinary fistula would probably have resulted, owing to the impaction at the ureteric orifice.

CASE 5.—A. H., æt. 25. First noticed stoppage of the stream during micturition eighteen months before, not complete, but causing straining. Frequency of micturition also increased to half-hour during the day, continuing for nearly four months. No penile nor lumbar pain. No hæmaturia. Urine 1012, neutral, trace of pus present. The house-surgeon sounded the bladder, felt a small stone and sent the patient to me. On cystoscopy, a vesical papilloma was seen above and immediately to the left of the internal urethral orifice, and beyond this a small uric acid stone. These were subsequently removed by suprapubic cystotomy. Had this case been not cystoscoped, a litholapaxy would have been performed, and probably much trouble would have been caused by the damage done to the villous tumour in the manipulations of the lithotrite.

You will, perhaps, tell me afterwards that these cases are picked as exceptional ones out of a number, and certainly this is so; but, gentlemen, I could add many more to them but for the fact that "time waits for no man." Let me say this, however, that I consider that all cases in which disease is suspected in the bladder or kidney should, before operation, be subjected to a critical cystoscopic examination, for by this means I am sure that many patients would be saved the only too frequent negative exploratory operations performed on the kidney or the bladder. It is not at all infrequent for vesical lesions to give rise to symptoms pointing to renal disease, and *vice versâ*, from secondary changes, so that unless the interior of the bladder be inspected, these errors will continue in the practice of surgeons, if they do not appear to the light in medical literature, although many operators have now had sufficient experience with the cystoscope to be able to avert some, at all events, of these mistakes. At the same time, I am only too fully aware that the instrument cannot come into general use, owing to the lack of facility to gain the experience sufficient for it, just as in the case of an ophthalmoscope or laryngoscope, but I think I have said enough about it to give you the impression that it is certainly more than a surgical toy.

With regard to the other instrument, the segregator, my experience has been more limited, but with further trial I am sure that the segregator of Luy's will be found of great assistance. Personally I have used it in several cases, and have satisfied myself that it answers all that is said for it. In Dr. Bryant's case, No. 2, above, of the man with painless renal hæmaturia, I used it and obtained perfectly clear urine from the one side and bright blood-stained fluid from the other; the former containing 1·2 per cent. urea, and the latter only ·5 per cent., and here obviously a complete separation was obtained. In another case I was able to demonstrate that an enlarged kidney, supposed to be diseased, was in reality enlarged in a compensatory degree, the other kidney being so much diseased as to be functionless, but so small that we were unable to palpate it, and thus was enabled to prevent a hazardous operation being performed on the only sound organ.

In conclusion, gentlemen, no one is more conscious than I of the shortcomings of this paper, but rather than put before you statistical figures, or the description of elaborate operations, I thought a general talk round the subject, with stress upon the diagnosis and examination of a patient, would be more acceptable to you. I must thank you for bearing with me so patiently, and if this paper is of any use to you in your practice, and will help to elucidate any of these obscure cases of urinary disease, I shall feel more than satisfied.

Pass List.

University of Oxford, December, 1905.

SECOND EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.

PATHOLOGY.—R. Evans, M.A., Jesus College.

MEDICINE, SURGERY AND MIDWIFERY (thereby completing the M.B. examination).—C. J. Pinching, B.A., St. John's College.

Appointments.

University of London.

At a meeting of the Senate, held 13th December, 1905, DR. HERBERT L. EASON, M.S., was recognised as Teacher of Ophthalmology in the University.

Civil.

HILLS, W. E., L.R.C.P. Lond., M.R.C.S., has been appointed Anæsthetist to the Hampstead General Hospital.

TELLING, W. H. MAXWELL, M.D., B.S. Lond., M.R.C.P., has been appointed Honorary Physician to the Meanwood Convalescent Home for Children.

Sport.

Rugby Football.

GUY'S v. OLD LEYSIANS.

Pleyed at Honor Oak Park on Saturday, December 30th, before about 300 spectators.

The Old Leysians kicked off, Covell handed forward, and a scrum was formed in our twenty-five. From the scrum McEvedy, who was playing half-back, came through with a fine rush, and passed to Stringer, who was shoved into touch in their twenty-five. Saunders then came away with a fine dribble and nearly scored. After pressing them for ten minutes McEvedy made a fine opening and gave a long pass to Morgan, who took it beautifully and dashed over, scoring behind the posts, McEvedy converted. From the kick-off Guy's again pressed. Pinching and Mullins both nearly got over. Guy's were awarded a penalty kick close in and at an easy angle, but Saunders failed to get a goal. This was soon followed by a try, Pinching getting over after some loose play. McEvedy converted. Up to half-time Guy's pressed, except for one burst by their forwards. At half-time, Guy's were leading by 10 points to nil.

Saunders started the second spell for Guy's, and we immediately pressed, and the men seemed to be putting more energy into the game. The forwards made some fine rushes, and nearly scored on several occasions, but thanks to the good defence of the Old Boys, were kept out. C. E. M. Jones and Saunders both got over, but were called back for forward passes. From a scrum in their twenty-five Moraghan passed to McEvedy, who dashed over on the blind side. Jones failed to convert. After a fine bit of passing between Morgan and McEvedy, the former got over but was called back, but about five minutes after from a good opening by McEvedy, Morgan again scored far out. Saunders just failed to convert. Soon after time was called, leaving Guy's the winners by 2 goals 2 tries (16 points) to nil. Team:—

GUY'S.—M. Earle (back); E. Morgan, W. S. Digby, L. B. Stringer, F. Covell (three-quarters); P. F. McEvedy and P. J. Monaghan (half-backs); S. McK. Saunders, H. R. Mullins, H. G. Pinching, A. Alcock, C. E. M. Jones, L. Milton, G. R. Hinde and M. Ball (forwards).

REMARKS.—The whole team played an excellent game, but are still in want of training. Earle played back, as Gibson is on the injured list; the former had very little to do, but did it well. The threes were all good, Morgan being at the very top of his form. Covell struck one as being weak in defence, and Digby was off colour. McEvedy at half was great, all his openings were marvellous, and well judged. Monoghan should stand behind the scrum and close up to it, when our forwards have got the ball. All the forwards were excellent, their tackling being especially fine, the best were Saunders, Mullins, Alcock, and Milton. With such a pack as we now have, Guy's ought to give a good account of themselves in the cup ties.

Association Football.

GUY'S v. REIGATE PRIORY.

This match was played on December 9th last at Reigate. From various causes our team was not at full strength, and we had to pick up a goal-keeper on the ground. A most enjoyable game resulted, the ground being in a very good condition, and the weather being favourable.

During the first half both sides kept the pace pretty fast, and a pleasant feature was the robust tackling seen everywhere. After change of ends, we pressed hard to begin with, and were very near scoring on two occasions. Later, Eccles received the ball half-way and made a dash for the net, through a back and a goal-keeper. This was the only score, and we won by an odd goal to nil. Team:—

GUY'S.———? (goal); E. G. Robertson, H. Bastard (backs); V. Townrow, A. Zorab, C. W. Greene (half-backs); H. N. Eccles, E. Barnett, W. F. Boxall, C. Witts, H. W. Berry (forwards).

GUY'S v. S.E. COLLEGE.

This match was played on December 21st. The boys gave us a much closer game than the score would indicate. What they lacked in pace and weight they made up in dash and endurance. We were always "on top," it is true, but they made us work hard to keep there, and they were distinctly unlucky to miss scoring on one occasion. Result: Guy's, 3; S.E. College, 0. Team:—

GUY'S.———? (goal); H. Bastard, H. G. Jones (backs); C. W. Greene, A. F. Denning, A. Zorab (halves), A. W. Berry, C. Witts, E. B. Hinde, E. Barnett, F. A. Barker (forwards).

GUY'S v. BECKENHAM.

Played at Beckenham on January 6th. We were without the services of P. V. G. Pedrick at half—whose place was well filled by V. Townrow—and C. H. Wood in goal, our hosts very kindly providing us with a custodian. A really hard-fought game resulted. Our opponents were a heavier set of men, it is true, but we seemed to have a better way of using our weight. Playing with the wind behind us in the first half, we pressed strongly, but could not break through the opposition. Shortly before half-time the Beckenham forwards obtained possession, and, with a clever bout of passing, scored through their inside-right.

On re-starting, there was much midfield play till Barnett made a pretty opening for Boxall, who shot wide. Shortly after, the same two players took the ball up, the latter scoring. The pace increased, and both sides were playing hard. The Beckenham forwards were playing well together, and their efforts were rewarded by a second goal about ten minutes from the finish. Shortly before time the referee awarded them a third goal, which was

palpably off-side. Result:—Guy's, 1 goal; Beckenham 3 goals. Team:—

GUY'S.———? (goal); E. G. Robertson, H. Bastard (backs); A. Zorab, A. F. Denning and V. Townrow (half-backs); F. Barker, E. Barnett, W. F. Boxall, C. Witts and A. W. Berry (forwards).

REMARKS.—Of the forwards, Berry is once more in his best form as to pace and dash, but we somewhat miss his accurate centres. Witts is our one marksman, but is absolutely starved by his centre. He is also the only forward who falls back consistently to help the halves. If Boxall could be brought to realise that he has a right-inside as well as a left, we should have no fear for the Cup. His pace has brought us a good few goals, but his inaccurate shooting has lost us more. Barnett is "always there" in attack, but only sometimes in defence, but he works so hard that this might be forgiven him. He is fast, resourceful, and a good shot, and makes many openings for the centre. Barker at outside-left is good, though not a robust player, he never shirks a charge, and makes rings round most halves. With a little more control over the ball, he would be invaluable. We will keep a keen eye on Townrow. His defence is as strong as one could wish, and he is, thank Heavens! keen But he really must try and feed his forwards. It is no use to rob one opponent of the ball merely to kick it out or pass it to another. In Bastard and Robinson we have two thoroughly reliable backs, and we need say no more. Wood is a custodian of "class." We value him, and he is on the committee. But, we would remind him that he has been absent from three matches without an explanation.

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Directions to be followed in sending *Diphtheritic Membrane*:—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. WELLS.

NOTICE.

H. A. L., SWANSEA.—No tubercle bacilli are found in this specimen, which is comparatively non-purulent in character.

W. L. W. M., HUDDERSFIELD.—This is a highly albuminous fluid, slightly alkaline in reaction and deeply blood-stained.

Microscopic examination of the centrifugalised deposit shows the presence of numerous shadows of red blood discs. Some granular degenerated cells and large numbers of cholosterine crystals. There are also granules of altered blood pigment (Hæmatin).

The cells are not distinctive, and there are no fragments of new growth in the specimen.

Spectroscopic examination of the pigment shows it to consist principally of Hæmatin or a mixture of Hæmatin and Met-hæmoglobin.

The characters are not those of recent ascitic fluid, but suggest an old accumulation either of ascitic fluid or more probably of fluid from some kind of cyst.

PATHOLOGIST.

Appointments.

Naval and Military.

Staff Surgeon F. DAVIDSON LUMLEY, R.N., has been appointed to the *Nile*.

Colonel W. E. SAUNDERS, C.B., R.A.M.C., has been appointed Honorary Surgeon to the Governor-General of India.

Surgeon-Lieutenant-Colonel CHARLES KNOTT, V.D., 3rd (Duke of Connaught's Own) Volunteer Battalion the Hampshire Regiment, is granted the honorary rank of Surgeon-Colonel.

Births.

FARNFIELD,—On December 25th, at Mere, Wilts, the wife of William Walter Farnfield, M.R.C.S., L.R.C.P. Lond., of a daughter.

HEARNDEN.—On December 21st, at St. Ives, Hunts, the wife of Hamilton Hearnden, M.R.C.S., L.R.C.P. Lond., of a daughter.

RECORDON.—On January 1st, at Duncombe Place York, the wife of Ralph B. Recordon, L.D.S., of a daughter.

SOPER.—On December 29th, at 307, Clapham Road, S.W., the wife of Bertram Soper, L.R.C.P., M.R.C.S. Eng., of a son.

WARD.—On January 4th, at Murraysburg, Cape Colony, the wife of P. H. Ward, M.R.C.S., L.R.C.P. Lond., of a son.

Death.

DANIEL.—On December 30th, at the Silver Birches, Epsom, William Clement Daniel, M.D., M.R.C.S., L.S.A., aged 65.

ED.—H. C. C.

GUY'S HOSPITAL GAZETTE.

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Passim.

IT is now more than six months since, with as great a stir as possible, the Million Shilling Fund was opened by the GAZETTE, and in that time some 70,000 shillings have been collected. Although this sum, £3,500, is not an amount to be despised, it is becoming increasingly evident that the title of the fund is too ambitious. A million shillings take a deal of collecting, and in view of the fate of similar great endeavours in the past—was not the personal popularity of Dr. W. G. Grace strained to the uttermost before an adequate testimonial to himself was forthcoming?—Guy's may perhaps rest content with less. It was obvious from the first that so large a sum would never be collected by the individual efforts of those directly connected with the hospital, by nurses and students alone, and that success would only be achieved if the enthusiasm spread to the general public. The general public, unfortunately, has proved somewhat apathetic, and subscriptions which are not directly due to the importunity of someone among us are few in number.

IT is the misfortune of all London hospitals that their interests are not closely identified with any one district. We may boast that in a sense we serve a whole nation, our patients come from far and near, our students take their knowledge, learned of us, all over the country, and in consequence it is upon nothing less than the nation itself that the burden of our support falls. Unfortunately, a nation is a somewhat unsatisfactory body to which to appeal, inaccessible and hard to move, and so the Million Shilling Fund has found it. The hospital of a provincial town is in a far better position; its upkeep is upon the city's conscience, and householders who do not annually subscribe to it according to their means are few. In London large subscriptions are frequent and princely, but with them the list is apt to begin and close. It was in an attempt to remedy this that the house-to-house visitation was begun in South London, where Guy's may be said to have some special claim, and the result was not very encouraging. We are at a loss what further to suggest. We have no fear that the individual efforts of those who are directly connected with the hospital will grow tired; the problem is how to make them more effective.

POSSIBLY the extensive literature of the Anti-hospital Movement which is now on foot, a literature which has the one object of crippling

those institutions financially, may have the opposite result, and stimulate subscriptions. We can very well imagine that any clean-minded man after reading such abominable stuff as the extract which we quote from one of these books, "St. Bernards," a story of hospital life, would make up his mind to subscribe to some hospital forthwith. The Physician in the story thus addresses his Assistant: "Would you like to do a gastrostomy? You ought to do one or two before you leave; it's a very pretty operation. I never knew a case survive more than a week, but there is nothing like trying; and if you pick out a case that must die anyway, you are welcome to use any of my cases that we can get to consent, and with Sister Agnes' help,—Sister is capital at getting consent to anything, aren't you, Sister?—it can generally be managed."

WE are indebted to Sir Thomas Stevenson for the following note on the death of a famous Guy's man:—The death of Dr. H. J. Sprengell, F.R.S., deserves a passing notice in the GAZETTE. Few at Guy's will remember him as the Assistant of Dr. Odling forty years ago, when the now Oxford professor was teaching chemistry at the hospital. It was at Guy's that Sprengell constructed his mercury or Sprengell pump, an instrument which has done so much for physics, and but for which Crookes would not have been able to attain his high vacuums, nor electricians to construct electric lamps. Nor would Röntgen rays have been discovered without its aid. The writer well remembers, just forty-one years ago, seeing Sprengell's original mercury pump installed in the N.W. corner of Dr. Odling's private laboratory, a room which is now used as the kitchen for the Clinical wards. Dr. Sprengell also made valuable contributions to practical science by his researches on explosives.

THE Eleventh Annual Dinner of the Dental Society will be held at the Trocadero on Saturday, February 3rd, at 6.30. The Chair will be taken by the President, Mr. Montagu F. Hopson, and Mr. Cosmo Bonsor has announced his intention of being present, and will reply to the Toast of the "Hospital and Schools." Tickets, the price of which is 6s. 6d. each (exclusive of wine), may be obtained from the Committee, or the Hon. Sec., Mr. J. A. Bowes, and an early application is requested in order to facilitate arrangements.

THE Annual Dinner of the Debating Society will be held in the College at 7 p.m. on Saturday, February 3rd, 1906, when the President, Dr. Savage, will deliver an address on "Legal and other Reminiscences." Tickets, price 3s. each, can be obtained from the honorary secretaries, the committee, or from the porters at the College Lodge. It is hoped that there will be as large an assembly as possible to welcome Dr. Savage. It will be noticed that these Dinners have unfortunately been arranged for the same evening. The Dental Student with a talent for debate will be in an awkward position.

WE publish to-day an appeal by the Sister in charge of the maids for the re-stocking of the library used by the ward maids. The books wanted should certainly be forthcoming, and we would ask men to let the request be known at their homes. It is true that if all the bookshelves in the College were ransacked, we doubt if there would be found a single book by Miss Annie Swan, but most families possess somewhere or other a rich store of just such works, never read now, perhaps, but prized as evidence of a careful upbringing.

EVERYONE will regret that our bright little contemporary, the "Guyoscope," should have come, at the very start, under the ban of the *British Medical Journal*. It appears that the "Guyoscope" carelessly made use of an expression which the *B.M.J.* gravely pronounces to have been good Anglo-Saxon, but which has been condemned "by modern lexicographic oracles as obsolete"—a most disheartening start for any paper to make. To-day we publish an article signed "One of the 'Guyoscope' Staff," an ambitious *nom-de-plume*, and one which raises a difficult question of editorial etiquette, for which we cannot find precedent to guide us. Rather than offend a contributor boasting such qualifications, we have taken it as written in good faith and published it. We hope, however, that no more of the "Guyoscope"

staff will place us in a like dilemma. Speaking in all earnestness, we fear that this particular member of the staff of our contemporary is really taking matters too seriously. The present "Guyoscope" certainly ought not to have to wait eight years for appreciation. If its second number was not so good as its first, still its third may very well be better than either.

THE Rugby Cup Tie, postponed owing to the fog, against Bart.'s, will take place on Monday next on the Richmond ground, at 2.45. Everything points to an interesting game, the result of which is extremely doubtful. Guy's will be strengthened by the inclusion of some new blood, Lee at full back, and Llewellyn, the younger brother of the Welsh international player, in the three-quarter line, but Bart.'s have a fine team and have lately been playing at the top of their form. The winner of the present match should contest the final with the London, who are also a likely side. The result of the Cup Ties has not been so open for many years.

THE entries for the annual boxing, fencing, and gymnastic display seem rather at a standstill, and it is for this reason only, the paucity of competitors, that arrangements are not further forward, and a date fixed. With a view of stimulating the entry, some of last year's winners in the boxing events have intimated their intention of standing down, so that, with the result more open, the entries should rapidly increase in numbers. Dr. Pavy has again generously forwarded a cheque to defray the expenses of the prizes, and, as last year, seven cups will be competed for. It would be a thousand pities if the competition was to fail from lack of support. On the other hand, Guy's team for the Interhospital Cup is likely to be a good one, and we wish it every success in the competition.

WE have received a furious letter from a well-known resident in the College, who unfortunately makes use of language too violent to permit of our publishing it—even in the correspondence column. It appears that his early morning rest is disturbed by a band of workmen sent there to annoy him by an official whom he calls "the Master of the Works." Having achieved their purpose, the workmen apparently withdraw at about 8 a.m., and are seen no more. The grievance is not a new one. If workmen must start noisy work at 6 or 7 a.m., then obviously someone must be disturbed, but it is not very obvious why the authorities should consistently select the College for the disturbance, where the majority of men are forced to go to bed late, and are not given to early rising.

Appointments.

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants in the Medical Wards.—Messrs. W. R. Greening (Dr. Taylor); A. S. B. Bankart (Dr. Hale White); J. H. Mayston (Dr. Pitt); C. W. Greene (Sir Cooper Perry).

Clinical Assistants in the Surgical Wards.—Messrs. A. S. Morton Palmer (Mr. Lucas); H. E. H. Tracy (Mr. Golding-Bird); C. F. Fothergill (Mr. Symonds); L. J. J. Orpen (Mr. Lane).

Ophthalmic Dressers.—Messrs. G. Cockcroft, W. H. Trethowan (Mr. Higgens, February 1st); J. S. Bookless, R. S. Harper (Mr. Eason, February 1st); G. W. Goodhart, T. B. Layton (Mr. Higgens, March 16th); R. Willan, F. A. Barker (Mr. Eason, March 16th).

Surgeons' Dressers.—Messrs. H. F. Joynt, C. H. Marshall, R. Evans, R. B. Dawson, H. J. B. Cane, J. W. Featherstone (Mr. Lucas); G. W. Dryland, H. J. Henderson, L. D. Stamp, J. W. Grice, N. Flower, A. L. Foster (Mr. Golding-Bird); C. B. Ticehurst, E. B. Hinde, H. B. Carlyll, C. H. Rippmann, A. T. Densham, G. G. Timpson (Mr. Symonds); H. Joste Smith, J. N. Watson, T. N. Wood, R. R. Walker. F. Morres, A. V. Ledger (Mr. Lane).

Obstetric Dressers.—Messrs. G. N. Bartlett, W. H. Miller, S. W. Daw, E. Wragg, A. Alcock, E. W. Giesen (March and April).

Externs.—E. Wragg, G. N. Bartlett, W. H. Miller, S. W. Daw, A. Alcock (February); W. P. H. Munden, B. K. Nutman, C. A. Basker, R. J. Reynolds, S. McK Saunders (March); St. J. A. Tolhurst, C. A. L. Mayer, E. P. H. Joynt, J. L. Rankine, P. P. Laidlaw (April).

Papers by Guy's Men.

A Lecture on Some Physical Aspects of Cardiac Failure. By David Forsyth, M.D. Lond., M.R.C.P.—*The Clinical Journal*, January 17th, 1906.

Gastrostomy. By William Sheen, M.S. Lond., F.R.C.S. Eng.—*Ibid.*

Chronic Laryngitis.

CLINICAL LECTURE BY F. J. STEWARD, M.S.

November 13th, 1905.

GENTLEMEN,—I intend this afternoon to speak of chronic simple laryngitis. By that I mean laryngitis not caused by tubercle or syphilis, but I shall refer also to a number of conditions which are closely allied to chronic laryngitis—so closely allied, both pathologically and by reason of the symptoms and the ætiology, that I will take them altogether in a group.

I first want to say a word about ætiology from the clinical point of view in order to help you to tackle a case of chronic hoarseness that comes to you, so as to find out its cause. Now, one of the commonest causes of chronic hoarseness is mouth-breathing, due to some form of nasal or post-nasal obstruction. So one has to inquire whether the patient breathes habitually through the mouth or through the nose. Some people will reply that they always breathe through their nose, with the mouth shut, and yet have one of the slighter forms of nasal obstruction. How shall we detect those slight forms of nasal obstruction which cause mouth-breathing for only a part of the twenty-four hours? The point may be elicited by asking the patient whether he has a dry mouth in the morning. It is in the later part of the night that any nasal obstruction, however slight, usually takes effect. The mouth and throat become desiccated, and the patient awakes with an uncomfortable dryness of tongue and mouth.

Next, why do so many of these people with chronic hoarseness due to laryngitis suffer from nasal obstruction? The reason is, that normally the air passed through the nose is changed in a number of ways. It is filtered of solid particles, animate and inanimate. Next, the air is warmed, and it has been proved experimentally that in its passage through the nose, simply from the anterior nares to the naso-pharanx, air is heated up from, say, 60° F., if that be the temperature of the room, to about 90°. Even when the external air is about at freezing point, the air in the pharynx is at about 80°. The opposite has also been proved experimentally; air above blood-heat has been passed into the nose, and has been found to be cooled down in the naso-pharynx. So the nose has also a heat-regulating function. Another important point to remember is, that the nose supplies a very large quantity of aqueous vapour; the great extent of mucous membrane in that organ is of use in that way, so that by the time the inspired air reaches the pharynx and larynx it is almost saturated with aqueous vapour. If breathing be carried on through the mouth instead of through the nose, filtration will not be carried out, and the pharynx, the larynx, and even the trachea, will become the seat of the deposition of micro-organisms, living and dead, and of particles of dust and dirt. Both those may set up irritation. Secondly, the air reaches the pharynx and larynx much drier than it should be, because it has not had the chance of becoming saturated with aqueous vapour. Thirdly, the temperature of the air in those parts is usually too low.

All these conditions will tend to set up inflammatory changes in the upper air passages.

The form of nasal obstruction which is commonest in children is that kind of post-nasal obstruction which is consequent upon hypertrophy of the post-nasal lymphoid tissue, otherwise adenoids. Such children breathe through the mouth, and in a certain proportion of them chronic laryngitis results. In adults there may be all sorts of causes of nasal obstruction, which I cannot enter into now. You will detect the kind of nasal obstruction in a particular case by a careful examination of the nose and post-nasal space. I have recently had an interesting case of chronic laryngitis which was due to nasal polypus. The patient came to me in September. In May he had had a bad cold, and was hoarse, and though he got better of his cold, he never got over his hoarseness. I asked him about nasal obstruction, and he said he had none, but he admitted he had a dry throat and mouth in the morning. I found he had a large polypus in the left nostril, attached to the posterior extremity of the left middle turbinate, and projecting into the post-nasal space. That was the cause of his laryngitis, because the polypus was removed a few days afterwards, and the laryngitis improved from that time. I believe he is now quite well. Hence the importance of carefully examining the nose and naso-pharynx in any case of laryngitis.

Apart from nasal obstruction, there are many other causes of laryngitis, particularly catarrhal causes, and for that reason you should make a careful examination for collections of mucus, and so forth.

A special form of nasal catarrh which should be mentioned is atrophic rhinitis, because it frequently causes laryngitis, owing to spread of the disease to the larynx, causing laryngitis sicca.

In nearly every case, then, there is some nasal or post-nasal disease which acts as a predisposing cause, but there are often exciting causes as well. Very often you will find that a chronic laryngitis is simply a sequel to an acute one. Often a patient will tell you he had an acute attack, which subsided to some extent, but afterwards ceased to get better.

Next, I would mention overstrain. People who have to do a lot of talking, or shouting, or singing—clergymen, singers, and actors, and hawkers especially—are more liable than others to attacks of chronic laryngitis. But their talking and singing are not the true cause, for in nearly all these cases you will find there is a predisposing nasal abnormality, producing nasal obstruction and mouth-breathing. But overstrain of the voice is a frequent subsidiary cause.

Then there is the influence of certain occupations. If a man is a mouth-breather and he has to work in a very dusty atmosphere, he is very liable to get dust from it into his larynx, and laryngitis may spring from that. I will mention two cases bearing on that. One was a stonemason, æt. 20, who had very bad chronic laryingitis indeed, and fairly-marked nasal obstruction. His laryngitis was set up by the fact that, in the first place, he was a mouth-breather, and, secondly, he was a stonemason, necessitating his working in an atmosphere containing sharp particles of stone. The second case was that of a man I saw recently, who came from Burmah, where he superintends a number of rice-mills. The dust of these mills keeps up his laryngitis, which, when at work, he has almost constantly. In his case the primary cause of the laryngitis was nasal obstruction due to chronic hypertrophic rhinitis.

There are other forms of chronic laryngitis which are spoken of as *secondary*. There is, for instance, the laryngitis which always occurs with tumour in the larynx, and the same with other diseases of the larynx, such as the infective granulomata, syphilis and tubercle.

With regard to *symptoms*, the most important is hoarseness, but it may vary very much in degree, and also at different times in the same patient. Subjects of chronic laryngitis, also, will often get better for two or three days, then they will get another attack. The hoarseness also varies with the degree to which the voice is used. A man with slight laryngitis may have a clear voice in the morning, but if he does a lot of talking the power of his voice becomes less and less. As a rule there is a certain amount of cough, but not very troublesome unless there happens to be trouble further down into the trachea and bronchi. As a rule there is not much secretion with the cough, but in some cases the secretion is a very troublesome factor. The chief thing that the subjects of laryngitis sicca complain of, for instance, as in atrophic rhinitis, are crusts, which may take several days to form, and which give rise to great pain and violent coughing before they can be dislodged. After they come away the patient will be comfortable for some days, and then the same train of symptoms will commence over again.

Having gone into the symptoms of the case, you next examine the larynx, to see what the laryngoscopic appearances are. They may vary greatly. In a simple chronic laryngitis which has not lasted very long, the chief thing you will notice is that the vocal cords have not their normal appearance. You will only be able to recognise the slighter degrees of laryngitis when you have had considerable experience of laryngeal examinations; they vary so little from the normal. The normal vocal cord is slightly yellowish-white; it moves quickly, and has quite a sharp edge. The changes that take place in chronic laryngitis are, first, in colour; secondly in mobility; thirdly, in contour. First, as to colour. The cords and the whole interior of the larynx may be distinctly red. If a patient comes to you with hoarseness, and you find the cords are a little pink, you may rightly conclude that the redness is sufficient to account for the hoarseness. With regard to mobility, when he phonates you will find that the vocal cords, instead of moving sharply as in health, often move sluggishly. As to contour, instead of the cords having a sharp edge, they will have a thickened, rounded appearance, something like a sausage. But if simple chronic laryngitis persists for some time, you find further changes, and one of the most marked of them, and the most common, is the production of the condition known as chronic hypertrophic laryngitis, in which there is hypertrophy of the mucous membrane of the rima glottidis—that is, of the mucous membrane covering the vocal cords, and of that covering the surface of the inter-arytenoideus muscle. The epithelium becomes thickened, and, in addition, the submucous tissue becomes infiltrated. This infiltration throws the mucous membrane into folds; and you will see the vocal cords thickened and with an irregular serrated edge, and in addition quite a marked corrugated mass, which sticks out from the posterior commissure, and prevents the vocal cords coming into contact behind during phonation, and in this way we

can account mechanically for the difficulty in the production of voice.

The next special variety one has to consider is the condition which I have spoken of as *laryngitis sicca*, in patients who have atrophic rhinitis. You will find such patients sometimes have hoarseness, and on looking into the larynx you will see, in addition to the redness, that the mucous membrane is peculiarly dry and glistening, and usually in some part of the larynx you will see very viscid mucus or a dry crust of a yellow, a greenish-yellow, or a black colour, adhering to the surface of the mucous membrane.

The fourth special variety is that known as *pachydermia laryngis*. That is a form of laryngitis which has certain peculiarities of its own. A peculiar wart-like thickening occurs in the position of the posterior third of the vocal cords. In this case there is not hypertrophy of the whole of the mucous membrane, that is to say, the epithelium and submucous tissue, but a warty outgrowth consisting of thickened epithelium more than anything else. There is usually a greyish-pink convexity on one side, and opposite to it there is a thickening which, viewed from above, forms a concavity, into which the opposite convexity fits. If you ask the patient to phonate, the cords move slowly together, and when he ceases phonating the two surfaces are obviously sticky, for as they come apart, fine threads of mucus are seen between them. This is particularly associated with overstrain of the voice, and it is very chronic indeed. I have here two specimens of the condition, which were found unexpectedly in the post-mortem room.

The next special variety I have to speak of is that known as *chorditis tuberosa*, or mostly called "singer's nodules." In this you find a thickening in a different part of the cord altogether. It consists of a tiny glistening pinkish-white thickening, about half the size of a grain of wheat, and oval, or rounded, in shape. It occurs just at the junction of the anterior and middle third of the vocal cord. Occasionally there is a little thickening on the other side, which has more a concave appearance. Usually around this thickening you will see rather more vessels than general, and the cord is pinkish, the depth of colour varying according to whether the voice has been used much or little. If the cords have been rested before you see them they may look normal. It is really a little hyperplasia of the mucous membrane of the cord at the junction of the anterior with the middle third, at what is termed the nodal point. It occurs particularly in tenors and sopranos, and it is practically certain that it is due to the faulty use of the voice in the production of "head notes." When using the "head register," the posterior two-thirds are held adducted together firmly, and it is only the anterior third which vibrates at all, *i.e.*, that part in front of the nodal point.

Another condition which I should mention in this group is subglottic laryngitis. It is a very rare variety, and the causation of it is extremely obscure, although it is often associated with other forms of chronic laryngitis—and with nasal obstruction, nasal catarrh, and so on. What happens is, that a general thickening of the mucus membrane and submucous tissue takes place in the portion of the larynx immediately below the vocal cords, and as a rule, in this disease, the thickening becomes very marked indeed, and more and more progressive, so that after a time the airway is obstructed and respiratory difficulty is caused, so that ultimately tracheotomy becomes necessary. What you see in subglottic laryngitis is this: the edge of the cord is usually red, because there is generally some laryngitis as well; but below the level of the cords, particularly during deep inspiration, you see a reddish mass projecting inwards. It is not the cord itself, because you can see the cord move above it, and as the cords separate you see it more distinctly, and when they close, the view is shut off.

Now I want to say a few words about diagnosis. I do not think you will have much difficulty, as a rule, about forming a diagnosis. There are certain points, however, which it is important to bear in mind before deciding you are dealing with simple chronic laryngitis. The three things to make certain of are these: first, ask yourself whether it is likely to be tubercular; secondly, is it syphilis? thirdly, is it possibly epithelioma? If you do not consider those points it is surprisingly easy to fall into error. I will try to indicate to you the chief means by which you can eliminate tubercle, syphilis, and epithelioma.

One of the most striking features about tuberculous laryngitis is the fact that it is not merely a laryngitis, but an infiltration. Next, in tuberculous laryngitis the infiltrated areas are often ulcerated; tubercles which in the first place are grey, caseate, and, reaching the surface, cause small multiple ulcers, which are scattered over the membrane. In simple laryngitis there is no ulceration at all, and rarely infiltration. Then in tuberculous laryngitis the areas are usually pale; the condition does not look like an

inflammatory one; there is a greyish-pink infiltrated area; but in simple chronic laryngitis the marked feature is the redness of the cords and surrounding parts. Again, in tubercle, pain is nearly always a marked feature, and lastly, you know that tuberculosis of the larynx is nearly always secondary. Though it has been said to have occasionally been proved to be primary, it is so rarely so that you need hardly consider it. So that you will generally find some signs of tubercle in the lungs or sputum. If you consider those points you will be able in most cases to eliminate tubercle from the diagnosis.

Next, with regard to syphilis. There is a form of syphilitic laryngitis which I do not think you can diagnose, *per se*, from simple chronic laryngitis. It occurs during the secondary stage of syphilis, and the only way you can decide whether it is syphilitic or simple chronic laryngitis is to consider what else the patient has got. If there are mucous patches in the mouth, or a hard chancre on the penis, or you find shotty glands, or a secondary syphilitic rash, you will have no doubt about the character of his laryngitis. It is quite likely that the first time you see the patient you will make a mistake. I made such a mistake in the case of a woman who came up with redness of the larynx, with hoarseness. We thought it was chronic laryngitis, and she was treated accordingly. A fortnight afterwards, on examining her, I noticed a mucous patch on the side of her tongue, and it became clear that the condition was syphilitic.

With regard to the tertiary forms of syphilitic disease, the question is, How shall you decide whether you are dealing with syphilis or with chronic laryngitis? The great thing about tertiary syphilitic lesions of the larynx is the fact that they are asymmetrical; there is a swelling or ulcer or scarring, usually on one side only. In chronic laryngitis the change is symmetrical, and moreover, if ulceration or scarring is present you will know you are not dealing with simple chronic laryngitis. And if you are in doubt you naturally go over the patient to see if there are evidences of tertiary syphilis elsewhere. You will find history is of the least importance, because in a doubtful case you are most likely to be misled by it.

In regard to epithelioma, the trouble is usually localised, the earliest sign being fixation of one vocal cord, later a swelling is present, which is nearly always ulcerated. Those factors will prevent your confusing it with simple chronic laryngitis.

Now a few words with regard to treatment. As in other diseases, you will naturally do what you can to eliminate the cause. For instance, if the patient is a child and there are marked adenoids, you will remove the adenoids before treating the laryngitis locally. If there are polypi, with nasal obstruction, or nasal catarrh, or atrophic rhinitis, you will carry out the proper treatment for it. Having attended to the cause, what treatment can you adopt for the laryngitis itself? You can carry out two distinct forms of treatment. In any inflammatory condition nothing does so much good as rest. So the ideal treatment for a case of simple laryngitis, whether it is acute or not, is to keep the part at rest by making the patient abstain from using the voice at all. Of course that is not always easy. But if you can get the patient to isolate himself and make all his communications in writing, his laryngitis will probably clear up very rapidly. Secondly, you can use local applications, and these applications, for simple laryngitis, may be considered in two groups. First, there are soothing applications, which are best applied by a spray, or by means of an atomiser. I think menthol dissolved in paroline is better than anything else. Or you may use some pine wood oil, or eucalyptus in dilute solutions inhaled in the form of a very fine spray. In addition, it will be necessary in many cases to apply some strong stimulants actually with a brush. Of those, I think the best are zinc chloride and silver nitrate. The first you can use of any strength in a watery solution, beginning with five grains and working up to thirty grains or more to the ounce. You need to begin with a much weaker solution of silver nitrate, two grains to the ounce is enough, but you can work up to even ten grains to the ounce. Or you can alternate between the two. Some people prefer solutions of sulphate of iron and sulphate of copper. But whatever you select, the secret is to use it thoroughly, and to use it frequently. It is because we are not able to treat the patients at the out-patients frequently enough that we are not very successful in treating chronic laryngitis there; to paint a case of chronic laryngitis only once a week is to waste time. It is better not to do it at all; so very often I do not do it. Begin by painting once a day, then as the case improves do it once in two days, once in four days, once a week, and so on.

With regard to the method of applying these substances to the vocal cords and inflamed parts. You must have a laryngeal brush and an artificial light, and a head lamp, and a laryngeal

mirror. It is of no use for you to think you can apply the solution properly without seeing what you are doing. I have had patients who told me that they had been painted by a doctor, but he had not used a mirror, and they have been surprised when I have put a mirror into their mouths. Make the patient hold his tongue himself, take your mirror in your left hand, and the laryngeal brush in the right. Then instruct the patient to breathe quietly, until you make some signal, at which he is to take a sudden deep breath, and thus widely open the glottis. Now carry brush into position over the larynx, guiding it by means of the mirror; then give the signal, and at the same moment quickly pass the brush downwards. As you would expect, the effect is to cause some spasm, but it passes off in a moment.

For pachydermia laryngis I do not think any treatment does much good, except that an oily spray makes the patient comfortable. Some people say iodide of potassium internally is useful, but I have never yet known it produce much effect.

For singer's nodule, local treatment is very useful, and if you are skilful enough at intralaryngeal treatment you can apply either the actual cautery, or pure nitrate of silver, or pure chromic acid to the spot where the nodule is, and so destroy it. Care should also be taken to tell the patient that she should take lessons in voice production, so as to avoid continuation of the probable cause.

Pass List.

Royal College of Physicians, Edinburgh.

EXAMINATION FOR THE MEMBERSHIP-M.R.C.P.

A. Kinsey-Morgan, M.D.

Second Conjoint Examination, Jan., 1906.

H. B. Kent, G. Packham, C. F. Searle, F. J. Wheeler.

First Conjoint Examination, Jan., 1906.

PRACTICAL PHARMACY.—W. R. Greening, H. C. Malleson, G. R. Phillips, A. T. Rivers.

CHEMISTRY AND PHYSICS.—F. S. D. Berry, A. M. Henry, J. P. Jones, L. Milton, H. Platts.

ELEMENTARY BIOLOGY.—A. L. George, T. J. Killard-Leavey, H. Platts, M. C. Thavara.

LICENSE IN DENTAL SURGERY.

PRELIMINARY SCIENCE EXAMINATION. — W. H. Edmonds, W. E. Guilding, C. C. Jones, I. Levy.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-first List of Collections.

(Received up to Wednesday, January 24th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections

Name.	Shillings.
Amount previously acknowledged ...	69,622
Davies, Miss E. M. (43s.)—Mrs. Laslett	5
Denney, A.—Collection at Carol Singing	12½
Dorcas, Sister (746½s.)—Mrs. Kingswell	20
Greaves, Dr. E. H.—Collection	27½
Hazell, Dr. Frederick	6½
Hughes, Miss S. E.—Collection	10
Kate, Sister (257s.)—A Patient	15
Kirkby, Dr. R. C. (30s.)—W. Davis	30
Naaman, Sister (67s.)—T. Warren	21
Roberts, Dr. Astley (60s.)—Miss Mortimer ...	60
Students' South London Collection—Further amount per M. G. Louisson	37
	69,866½
Further collections from sources outside the Hospital	44
TOTAL (up to 24th inst.)	69,910½

Pupils' Physical Society.

THE seventh meeting of the Session was a clinical evening, held in the Wills Library on Saturday, January 13th, 1906, at 8 p.m. Mr. H. F. Bell Walker was the President in the chair, and the following cases were shown:—

1. Post-typhoidal necrosis of the tibia. By Mr. G. C. F. Robinson.
2. Volckmann's contracture. By Mr. St. John.
3. Mitral stenosis and ?Raynaud's disease, together with ?aortic, ?pulmonary, regurgitation. By Mr. O. V. Payne.
4. Empyema ruptured into lung; of five years' standing. By Mr. O. V. Payne.
5. Friedreich's ataxy. By Mr. Ewing.
6. Paramyoclonus multiplex. By Mr. Macalister.
7. Locomotor ataxia. By Mr. Chase.
8. Visceroptosis, or Glénard's disease, with 4 parts per 1,000 of albumen in the urine. By Mr. Perkins.

There were thirty-one members present, and Messrs. G. C. F. Robinson, Bell Walker, O. V. Payne, Macalister, Leipoldt, St. John, Perkins, Digby, Chase, C. B. Ticehurst, and the Secretary, joined in the discussion. The meeting adjourned to coffee at 10 minutes past ten.

Dental News.

THE different aspect of the Conservation-room at the end of the month, as compared with the beginning, is remarkable. Practically all the men have returned after the Christmas vacation, and now that the October entry have migrated from the laboratory, and left their probationary work behind them for ever, upstairs they wear that air of keenness and dignity which is always to be noticed upon the faces of men when they have reached a like stage in their hospital career. Let us hope that they will realize early, if they have not already done so, that the success obtained in and the pleasure derived from operative dentistry, is chiefly dependent upon the thoroughness with which the work is carried out.

The idea of reserving those two rows of chairs at the south end of the room is an excellent one, and adds not a little to the comfort and smooth working of the place.

We would hail the advent of the new sterilizer with delight. It has been installed about three weeks now. Whether it has inspired such a feeling of awe that men are loth to make too sudden advances upon it, or whether it is because the authorities have placed the aquarium directly in front of it, so as to hide it from our faces, we do not know; but it is a striking fact that you never see a crowd of dressers pushing past one another to use it, although there are often fifty or so working in the room at once. The sterilizer is not for the use of the house surgeon, nor the junior staff, but is for everybody, even the casualty dressers. We publish the following cases:—

1. S. W., æt. 33, was admitted in November, having been advised by his club doctor to seek dental treatment. His glands were swollen and very hard, his breath foul, and his appearance pallid and unhealthy. He complained of continual soreness of his throat, weakness and wasting, which had continued for some years. He stated that he could not properly masticate his food, owing to the soreness of his mouth, but his digestion, strangely, had not troubled him. On examination, his teeth were found to be in a very neglected state, being for the most part broken down to the level of the gum; pus was oozing from around the necks of many, and the gums were swollen and congested, as were also the pharynx, soft palate and fauces. He was given a gas ticket, and on separate occasions nearly all his teeth were removed, and the sockets syringed, and an antiseptic mouthwash prescribed. The patient's condition has since improved considerably, the swelling in the glands and the inflammation of the palate and throat having disappeared. The case is interesting as showing excessive weakness and debility, extending over many years, due to purely dental causes, viz., the continual swallowing of pus from septic roots.

II. MYELOID SARCOMA OF THE UPPER JAW.

C. E. C., æt. 7, was admitted to the Dental Department on November 9th, with a swelling in the region of the upper right central and lateral incisors, which were absent. The left permanent central was present, but considerably displaced from the median line.

There was a history of a blow early in 1905, followed by loosening and extraction of the right central in October, 1905, which was believed to have been the deciduous one. The swelling measured about ¾ inch from side to side, and ½ inch from above downwards, being oval, and having its lowest part much flattened. The outer alveolar plate and upper lip were pushed forward. It was red and vascular, fluctuating and painless to the touch.

In view of the absence of the right permanent central a dentigerous cyst was thought probable. A skiagram was taken on November 13th, but was a failure. A model was also made.

On November 23rd, the patient was given gas, and a crucial incision was made into the swelling, the contents being scraped out as far as possible. There was profuse hæmorrhage, but no pus or cystic fluid, neither was there any indication of a developing tooth. The contents were soft, pink and gelatinous, streaked in parts with red.

The cavity was packed with gauze and frequently syringed. The right central, which had been extracted in October, was produced on this occasion, and proved to be the permanent tooth. A diagnosis was made of a myeloid sarcoma, which was confirmed by a microscopical examination. The patient was allotted a bed in Job ward, on December 11th, under Mr. Symonds, who removed the tumour on December 15th. A circular incision was made and the bone scraped, a drain being inserted. At the time of writing the patient is doing well, and the right lateral has made its appearance.

Change of Address.

Dr. W. Evelyn Alston, from 22, Bentinck Street, W., to 15, Fitzroy Square, W.

Dr. W. L. Baker, from Toxteth Park Infirmary, Liverpool, to "Lyndhurst," Warwick Gardens, Worthing.

Dr. J. M. Barrionuevo, from Guy's Hospital, to San José, Costa Rica, Central America.

Mr. A. Alan Forty, L.D.S., from Guy's Hospital, to 26, Park Square, Leeds.

Mr. A. Harris, L.D.S., from 14, Rosendale Road, West Dulwich, to the Royal Naval Barracks, Devonport.

Dr. Charles Jephcott, from 2, The Northgate, Chester, to 12, Upper Northgate Street, Chester.

Mr. Charles D. Pye-Smith, M.B., B.S. Lond., F.R.C.S. Eng., from Guy's Hospital, to Vernon House, Huddersfield

Mr. J. F. Robinson, F.R.C.S. Eng., Edridge Road, Croydon, to 105, Park Lane, Croydon

Dr. W. M. Robson, from the Fever Hospital, Homerton, London, to 68, Abington Street, Northampton.

Dr. E. J. Tongue, from Rocklands, East Grinstead, Sussex, to Winterton, Doncaster.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The New "Guyoscope."

DEAR SIR,—The somewhat free use of my name in a letter which appeared in your last issue leads me to hope that you will grant me a little space in which to seek information about your correspondent whose solicitude for the fair name and fame of the "Guyoscope" is so evident.

That his concern in so good a cause is genuine no one can doubt, since it has induced him to overcome his shrinking from publicity in order "to thus air his own personal views," and it would seem to imply that there are grave reasons why those views should be accepted with profound respect. Such ardent championship cannot fail to produce feelings of pleasure and gratification in all those fortunate enough to have been connected with the old "Scope."

But when this gentleman's zeal manifests itself in a desire to control the actions of the men who, in '97–'98, made the "Guyoscope" what it was, some explanation seems to be called for.

The Blue Books of '97–'98, I believe, contain no mention of this gentleman's mame, so that it is difficult to perceive in what manner he can have identified himself with the destinies of the old magazine. His attitude, therefore, in proclaiming that the title of the "Guyoscope" shall be used no more, is incomprehensible. If his patronage so dominated the former committees—"the old gang" as he familiarly terms them—that he conceives himself to be in a position to deny them even the power to authorize the use of this word, then I take it unkindly of my old friends to have left me in complete ignorance of Mr. Ray Edridge's existence up to the present time. As matters stand, I feel compelled to ask what may be his credentials that, in his high-handed fashion, he pretends to dispose of the claims of the "old gang" to use their own judgment. It seems to me curious that Mr. Ray Edridge should consider that the mere adoption (by permission) of a title that has previously done good service renders it impossible for the present staff "to be judged on their own merits," but it is to be sincerely hoped that there are some men who, unlike Mr. Ray Edridge and "the many others who think as he does," are still capable of forming a just and unbiassed opinion.

Of his perfect right to form whatever opinion he may please of the new series there can be no question; whether it was necessary or even advisable to publish that opinion is quite another matter: but that his ingenuous and disinterested (I hesitate to say "gratuitous") impulse entitles him to pose as supreme arbiter on questions of either style, good taste or sportsmanlike conduct, I positively deny.—I am, sir, yours truly,

STANLEY COCK.

18th January, 1906.

An Appeal.

DEAR SIR,—Will you kindly allow me, through the medium of your columns, to appeal for assistance for the much-needed restocking of the library used by the seventy-five maids of this Hospital? I should be delighted to receive either new or old books for this purpose. May I suggest standard works, suitable books of travel and biography, and tales by Annie Swan, Rosa N. Carey, Edna Lyall, Charlotte Younge, etc.—Believe me, yours faithfully,

FRANCES A. SHELDON,
Sister-in-Charge of the Maids.

Nursing News.

MATRON'S OFFICE.

Sister Charity, Miss M. Martyn, left the hospital on December 1st, 1905. Miss Martyn entered the Hospital in 1897, and has been Sister in Charity ward since 1901. Miss Gertrude Morrah, who has been Sister of the Out-Patient Department since December, 1902, has been appointed Sister of Charity ward, and Miss Mildred Brown, who has been acting as the Surgical Night Sister, has been appointed Sister of the Out-Patient Department.

On December 14th, 1905, Nurse Waterman left the hospital on completion of her three years' training, and Probationer A. Daniels was appointed to succeed her as Head Nurse in Bright ward.

Nurse Garnet, who entered the hospital in 1895, and has been Staff Nurse in Naaman, Miriam, and the Light Department, left the hospital on December 15th, 1905, to take up an appointment on the Nursing Staff of the Sailors' Hospital, Las Palmas. Probationer Prycke has been appointed to succeed her as Head Nurse in the Light Department.

On December 30th, 1905, Nurse Douglas left the hospital on completion of her three years' training, and Probationer Cadell was appointed to succeed her as Head Nurse in Mary ward.

Nurses Woodward and Hedgcock left the hospital on completion of their three years' training on December 31st, and Probationers Robinson and E. Cooper were appointed to succeed them as Head Nurses in the Out-Patient Department.

Nurse V. Manning left the hospital on January 1st, 1906, having completed her three years' training in October last. Probationer K. Yeates has been appointed to succeed her as Head Nurse in Astley Cooper ward.

In Lighter Vein.

"DE MORTUIS NIL NISI BONUM."

Immortals :

(i.) The Spirit of Lighter Vein.

(ii.) The Spirit of the old "Guyoscope."

Mortals :

R— E——, Esq., with small, but very select, coterie of followers.

Curtain rises. The *Mortals* are making loud and ill-advised lamentations over the death of the *Spirit of Lighter Vein.*

Enter *Spirit of Lighter Vein.*

Spirit of Lighter Vein :

Pray cease this loud and unmelodious sighing,
I am not dead, and have no thought of dying.

Mortals :

It must be so, because we all have said
You could not live; therefore you must be dead.

S. of L. V. :

But I do swear by this, my good right hand,
That I am still a power in the land.
Nay, more, by every sort and kind of verity,
I claim your welcome still, in all sincerity.
You must receive me, for, midst all your strife,
I stand for Humour: 'tis the "Salt of Life."
I mould your minds and make your hearts aspire
To higher ideals; and I whet desire
For better things in this, your student life,
Wherewith to fight the World, which still is rife
With Humbug, and a multitude of ills
Which you must cure with other things than pills.
Wit, well restrained and quite first-class, is rare,
Seek to possess it, for 'tis worth your care.

Mortals :

But will your wit enable us to cope
With the jesting of the new "Guyoscope"?
We thought it would an awful failure be,
And do not like its "sporting raillery."

Enter *Spirit of "Old Guyoscope."*

S. of Old Guyoscope :

You make a fuss about its gentle hits,
In *our* day we had sent you into fits.
Though now you praise us and belaud our Muse,
We used at times, when writing, to infuse
A drop of gall in our cup of humour,
If men had faults, known to us by rumour.
A thing which gives us now the most surprise
Is that men praise us, and our paper prize.

Mortals :

But you were all so clever and funny
That your paper was worth any money.

S. of O. G. :

And our principal reason for letting it drop
Was because our subscription list came to a stop!

Mortals :

The men of your year must have been very dense
Not to see that your wit and charm were immense.

S. of L. V. :

And now we come to the point, friends, at last:
"Nothing e'er equals the things that are past."
Our school days are best days, once they are over
In mid-life we think our student days clover;
There's a roseate haze o'er the things that have gone,
Like the clouds near the sun on a fine summer's dawn.
The old "Guyoscope" was witty and wise,
Good in its day, and a credit to Guy's.
But it's over and gone; here comes the new.
Give it kind welcome, it must amuse you
And others about you; so do look pleasant,
Past and Future are linked by the Present.

S. of O. G. :

So long as it lives it will try to please
And not be called "good" until its decease.
When eight or nine years have past since its death
Lots of men will praise it with bated breath.
Whilst it lives you will deprecate it;
When it is gone you will overrate it.

Mortals :

Our feelings of distaste are certainly sinking,
Perhaps you have brought us to your way of thinking.

S. of O. G. :

You were bound to come round, for you like the style
Of humour with which we "raise the tardy smile."

S. of L. V. :

And, sirs, my spirit dies not in a mortal torment.
The Spirit is Immortal, though the Art lies dormant.

ONE OF THE "GUYOSCOPE" STAFF.

Suppurative Pylephlebitis.

A paper read before the Pupils' Physical Society on December 16, 1905, by C. L. LEIPOLDT.

MR. PRESIDENT AND GENTLEMEN,—In bringing before you to-night, for your discussion, the subject of suppurative pylephlebitis, I must preface my remarks by asking your indulgence for a paper which is necessarily brief and incomplete. When your secretary asked me, three weeks ago, to read a paper before your society, and suggested this subject, he also hinted that this very limitation of time and the incompleteness it entails, might make any skeleton essay all the more open to criticism and defence, and therefore all the more open to discussion and debate. It was in that spirit that I commenced my paper, but I found, as I proceeded, that the subject I have chosen is so interesting, and in some respects so important, that I cannot but apologise to you at the onset for treating it, as I must perforce deal with it to-night, in so cursory and rudimentary a manner. For the subject itself I feel I need make no apology. It is one not merely interesting from a clinical aspect, but equally so from the bearing which it has on other diseases and conditions which we may have to encounter. It is one of those disorders that lie on the borderland between medicine and surgery, and that therefore appeal to both sections of our profession. You may tell me that it is, comparatively speaking, a rare disease, and that our medical text-books, and even the voluminous Allbutt, and the still more bulky French dictionaries of medical sciences, treat it in a stepmotherly fashion, as if it were barely worthy the brief space they grant it. But, as I will try to show you, it is not such a very rare disease after all. During the present year we have had three well-marked cases of it in the wards, which many of you will doubtless recall to mind, and two others in which a diagnosis of suppurative pylephlebitis would have been consistent with the symptoms. I think, therefore, that you will agree with me that it is a subject which is well worth our discussion to-night, and allow me to draw your attention to a few points about it which seem to me to merit a somewhat fuller description than they are allowed in our text-books.

And, gentlemen, since the prelude to every description or discussion must be a more or less exact definition of the subject to be discussed, allow me to remind you that pylephlebitis, in its literal sense, means nothing more or less than inflammation of the coats of the portal vein, or, if you like to be more exact, of the inner coat alone. It has nothing whatever to do with pus, and to include in a record of cases of the suppurative form, those in which the autopsy disclosed merely a clot in one or other of the portal radicles, is to make that record false and of little value. Let me ask you, therefore, to bear in mind the two clinical varieties of the disease which are described, the so-called "adhesive" and "suppurative" forms, and to note that I am not at present concerned with that type of the disease which stops short of pus formation. Under those conditions, then, let me define suppurative pylephlebitis as an inflammation of the portal vein, or of any of its radicles, accompanied with the formation of pus or a breaking-down thrombus. I admit that there is very much to be said against my definition, since more than one observer has drawn attention to the fact that in many cases a definite inflammatory disorganisation of the coats of the portal vein cannot be proved, but for ordinary purposes, I take it, the presence of pus or a breaking-down clot is sufficiently convincing evidence of the existence of such inflammation.

In 1777, Sasse reported the case of a male child who suffered from convulsions, pyrexia, and a suppurative umbilical sore, and whose portal vein was found to be distended with pus at the autopsy. This, the first recorded case of what was then styled "portal pyæmia," remained unique until, half a century later, Baczynski gave an account of several analogous cases, and recognised the disease as a definite one to which, according to its duration, he applied the terms "chronic" and "acute" portal pyæmia. This differentiation remained in force until Shönlein, in 1841, proposed the name "pylephlebitis," and suggested the distinctions "adhesive" and "suppurative." He described three cases, one of which he had diagnosed before death, and the description which he then gave of the disease is one which holds good to-day. Following him came Niess, who laid it down as an axiom that all cases of the suppurative form were secondary to suppuration elsewhere; Budd, who applied the term even to a case of syphilitic hepatitis; Wünderlich, who regarded it as quite a common disease, and supposed that it commenced essentially as a thrombosis of one of the lower and smaller portal radicles; and Rokitansky, who concerned himself more especially with the adhesive form. In 1855, Langwagen wrote an exhaustive dissertation on the pathology of the disease, and in 1846 Waller drew attention to the fact that general pyæmia was not an invariable concomitant, but that, on the contrary, abscesses outside the liver were rarely to be found. Both he and Oppolzer regarded it as a very rare disease. Four years later Roberts, still adhering to the old terminology, collected some important details with regard to the symptoms, and wrote of the clammy sweats, the splenic enlargement, and the rigors as characteristic of the disease. In 1858, Frerich published his monumental "Klinik der Leberkrankheiten," in which he summarised most of the cases, and reported several new ones. Since then other writers have considered the disease from various aspects, and many papers have appeared on the subject—amongst them, three valuable ones in our own Hospital Reports by Drs. Carrington, Bryant, and Taylor—so that at present the literature of pylephlebitis is too full and too interesting to justify the scanty references to be found in ordinary text-books.

From such papers as I have been able to obtain during my limited time, I have drawn up a list of 81 recorded cases, and I have added to that tabulation the abstracts

of six cases from our own wards during the last four years which have not hitherto been published. For the first of these I am indebted to Dr. Walker, who has kindly allowed me to use the abstract of the most recent case, while for the second, which is one of the most interesting in my list, I am indebted to Mr. Mollison, who gave me particulars which I would otherwise not have been able to obtain, since the report of this case has unfortunately been lost. Of these 87 cases I have, on second thoughts, taken only 84, since in the case of the others there is some doubt as to the correctness of the diagnosis, and no trustworthy abstract of the autopsy. The remainder, however, will be of sufficient interest for purposes of discussion and criticism, and I propose, therefore, to give you, as briefly as I can, some of the more important points in connection with them.

Let me read to you the abstract of two, more or less typical cases, which will give you a summary of the course and onset of suppurative pylephlebitis. From these you will notice that the disease presents, in its clinical aspects at least, a picture which is strikingly similar to a case of pyæmia on the one hand, and of typhoid on the other.

CASE 87.—F. G., a tin-plate worker, æt. 22, was admitted into Clinical ward under Dr. Beddard on July last, for severe abdominal pain. He had previously been strong and healthy, and the only point of interest in his family history was the somewhat doubtful statement that his father had died of intestinal growth. Six weeks before admission he became suddenly ill with diarrhœa and faintness, and had been sick once. A tentative diagnosis of typhoid fever was made, and he was sent to a fever hospital. There he had rigors and an intermittent temperature, and no Widal reaction could be obtained. It was decided that he was suffering from enteric and he was sent to Guy's. On admission he was pale and wasted, but did not complain of abdominal pain or tenderness. His pulse rate was 130, and his temperature 99°. There was no sign of janndice. His liver dulness was increased, extending from the fourth rib to three inches below the right costal margin. A rectal examination was negative. Moist râles were to be heard over both bases, and a pleuro-pericardial rub and an apical systolic bruit were also detected. His urine contained a trace of albumen, but no blood, and apparently no casts. The blood count showed a slight leucocytosis—9,000 per c.mm. His abdomen was opened, it having been found that his right flank was quite dull. At the operation a collection of thick fluid was found in the abdomen, but no thickening or any sign of perforation could be detected. On the day after the operation he vomited, the vomit containing blood, but no bile. I may mention that before the exploration a tentative diagnosis of pylephlebitis had been made which, according to the report, was changed to one of old perforated duodenal ulcer. The patient lived for three days, and at the autopsy the liver was found riddled with abscesses, the appendix adherent to the ascending colon and filled with curdy material, while the portal vein contained pus and a breaking-down thrombus.

The second case, which is interesting because the disease was correctly diagnosed during the lifetime of the patient, is that of a man, aged 22, who came under Dr. Shaw in May, 1902, with a history of old appendix trouble, and of sudden severe abdominal pain, accompanied with high temperature, enlarged liver, pleurisy, and albuminuria. The pain had been the first sign of the disease, and had been quickly followed by rigors, diarrhœa, jaundice, profuse sweats, and vomiting. On admission his pulse was 130, dicrotic. The liver was enlarged, but there were no spots and the spleen was not palpable. A Widal was negative, and there was a marked increase in the white blood corpuscles. Five days after admission the patient died, and at the autopsy was found to have suffered from suppurative pylephlebitis, consequent on an old appendix lesion.

Such, you will find, is the usual course of a fairly typical case of pylephlebitis, and such has been the course of the majority of the cases on my list. You will find that all present points of interest and for discussion, and I will try, briefly, to draw your attention to one or two of these points.

First, of course, comes the question of ætiology, and here again, it is interesting to glance at the history of the disease and note what older observers ascribed it to. Thus Baczynski regarded alcoholism as a factor in causation, the French observers added cold, mental irritation, and head injuries. With regard to the last, it is worth while to note that some text-books still give head injuries as special causative factors in hepatic abscesses, notwithstanding the fact that Wilks and Moxon definitely state that they have found no evidence to support such an assertion. Direct injury to the liver, suppuration in any part drained by the portal system, enteric itself, and many other causes have been given as points worthy of attention in the ætiology. Analysing my own list I find that 30 out of the 84 cases were consequent on appendicular trouble, a percentage of 35·7. It is a result which is quite in agreement with previous statistics. Dr. Bryant's cases showed a percentage of 40 due to appendix lesions, which is perhaps nearer the mark, when we consider that there are probably many cases of suppurative pylephlebitis due to appendicitis which are never recorded. Other abdominal lesions follow in varying percentages. Thus out of the 84 cases there were four due to umbilical suppuration, five due to gall bladder troubles, including one of growth of the gall bladder, two due to suppurative cholangitis, two to pelvic suppuration, two to gastric ulcer, two to pancreatic abscess, three to splenic abscess, two to what is rather vaguely described as "suppuration under Glisson's capsule," and one case respectively due to fistula in ano, tubercle, chronic peritonitis, perisplenitis, suppurating mesenteric glands, infarct in lung, duodenal ulcer, ulcerated cervix, peritoneal abscess, ulcer of rectum, and right-sided empyæma. Four cases are ascribed to general pyæmia, in one case following hæmorrhoidal operation, while three interesting cases were evidently the result of injury. One of these is

the often-quoted case of a fishbone perforating the inferior mesenteric vein; the other is the case recorded by Clements of a soldier injured by a kick in the hepatic region, and the third is a case of pylephlebitis following a sudden strain, at the autopsy no apparent starting-point for the disease being discoverable. An interesting point in the ætiology is the comparative rarity of enteric or dysentery as a cause of the disease. After all, when one considers the frequency of these two complaints, it is reasonable to expect that a large number of cases of suppurative pylephlebitis would be found to be due to intestinal ulceration consequent on one or the other of these diseases. As a matter of fact, however, there are very few cases in which either typhoid or dysentery can be accepted as direct causative factors. Dr. Browne, in his recent paper in the *British Medical Journal* has laid some stress on this point, and looking over my list I find that in only three cases is typhoid given as the cause, while I have not been able to find a single case in which dysentery started the disease. Davidson in "Albutt" includes the latter as a rare cause, but in the only case in my list in which there was any history of dysentery there was also a well-supported history of Malta fever and hepatic abscess, and the autopsy showed that general pyæmia was probably the direct cause of the suppuration in the portal vein. To this list of causative factors must be added abortion, pyosalpinx, and ulceration of the common bile duct.

Turning to the interesting points of age and sex, I find that out of 82 cases in which the sex was given, 61 were men and 21 were women. For the males the youngest age was three weeks, the lesion in that case being a suppurating umbilicus, whilst the oldest was 69 years, the average age for males being 25 years. For the women the average age is somewhat higher, namely, 32 years, the youngest being 16 and the oldest 60 years of age. A large number of males were under 20 years, and comparatively few were over 40. In the women, however, the majority were over 20. In neither the family nor the personal history of the majority of cases have I been able to find anything worth mentioning, with the possible exception of one case in which the patient's father had died of "tumour of the liver," and another in which one parent had died of "intestinal tumour." Nor does occupation seem to have the slightest bearing on the disease, and the predisposing causes are so vague that one cannot lay much stress on them either. It is interesting to note, however, that in the majority of cases the patients had enjoyed uninterrupted good health, and that the disease set in very suddenly and without the usual premonitory symptoms which precede other diseases.

I have gone into some detail on these points, not only because the subject of ætiology, in any disease, is in itself interesting, but because in suppurative pylephlebitis it is one of which we know comparatively little. Broadly speaking, I take it, we may accept Niess' dictum that it is a disease which is always secondary to suppuration somewhere else, not necessarily only in the area drained by the portal system. That suppuration in that area is most commonly the source of infection in portal pyæmia will, I think, be disputed by few, but it seems to me that suppuration outside that area may equally be accepted as a causative factor. In some of the apparently causeless cases which have been ascribed to such things as the use of drastic purgatives, mental worry, insanity, etc., I find that one can generally show that there has been some intestinal lesion, most frequently a perforation of the appendix, and after all the clinical importance of pylephlebitis lies mainly in the fact that it is a possible complication of appendicitis. But when you have considered all these probabilities, you still have to account for a number of cases in which no apparent cause or starting-point for the disease can be discovered. There are twelve such cases in my list, and they are all interesting. They are cases which ran a typical course and showed the typical lesion, though some of them were complicated with other subsidiary lesions elsewhere. Take for instance case 39, of which a most full and detailed report is given. Are we to assume that the hepatic abscess found in this case was the primary source of the trouble, or was it merely secondary? Then there is Dr. Bryant's first case, in which he suggested the swallowing of pus as a possible cause. It seems to me that, bearing in mind the many anastomoses which the portal has with the general venous system, it is not improbable that a suppurating lesion, say above the diaphragm, may affect the portal vessels and set up, indirectly, a suppurative pylephlebitis. Possibly there are other causes which may account for these puzzling cases. We know, for instance, from the experiments of Wooldridge, that certain proteids when injected cause portal thrombosis, and given the existence of a clot, it is easy to imagine what would happen were it to become infected by bacteria. At any rate, the possibility of some such explanation is one which I would submit for your discussion. The terms "idiopathic" and "functional" are mere cloaks to cover our ignorance of primary causes, and the sooner they are erased from our text-books the better both for our self-respect and our science.

Next I come to symptoms. You will have noted that there are some symptoms in the various cases which, if not characteristic of the disease, are yet sufficiently so to be valuable aids towards a correct diagnosis. Taking all my cases together, I find that these various signs and symptoms have been noticed: rigors, jaundice, abdominal distension and pain, enlargement and tenderness of the liver, spleen, inguinal glands, and axillary glands; vomiting, great thirst, diarrhœa, anorexia, disordered sensations, clammy sweats, quickening of the pulse, high fever with stages during which the temperature was subnormal, distension of abdominal veins, leucocytosis, albuminuria, incontinence, delirium, ascites, cyanosis, hæmaturia, paroxysmal pains, pains in the limbs, headache, dyspnœa, and in many cases others which depended on pulmonary complications. It is an extraordinary jumble of symptoms, and it taxes one's ingenuity to find anyone which can be said to be

characteristic of the disease. As a matter of fact, here, as in most other diseases, there is no characteristic symptom, and we have to take into consideration the combination of symptoms and the individual circumstances of each case, much more than the occurrence of any one symptom. Bearing that in mind, it is rather surprising to find that the diagnosis of suppurative pylephlebitis is generally regarded as exceedingly difficult, if not impossible. The occurrence of rigors, jaundice, abdominal pain and hepatic tenderness, accompanied with intermittent fever, with clammy sweats, and with a small, quick pulse, is evidence enough to make us bear in mind the possibility of portal suppuration. When we meet that train of symptoms, when after an operation we find our patient in that condition which Sir Samuel Wilks has so aptly described as "typhoid occurring in a surgical ward," there can be little question about the diagnosis. But there may be only one of these symptoms present, and that only in a moderate degree. Take for instance the rigors. In my list of cases they occurred only in 54 per cent. of the cases, even when we take in those instances where there is no positive mention of their occurrence, the mention of herpes as circumstantial evidence of their presence at some time or other. It is possible that they may have been overlooked, but it is difficult to believe that a symptom so generally associated with portal suppuration should not have been mentioned were it present. Jaundice, I find, was present in only 40 per cent. of cases. It varied from "intense jaundice" to what the French observers term "subicterique," and, as you can conceive, there must always be a marked difference of opinion as to what constitutes jaundice. I well remember a case that came under Mr. Symonds with gangrenous appendix while I was dresser. The boy's conjunctivæ were definitely yellowish to my eyes, and yet the house-surgeon and the majority of the firm said they were merely sallow. Still, if jaundice is present it is a valuable sign in suppurative pylephlebitis, and it is interesting to discuss it. To what is it due? Grant and Breschet, who first proved the derivation of bile pigments from the blood, held that it was directly due to the breaking up of hæmoglobin in the portal vein. Frerich, who examined various blood clots from the mesenteric veins and failed to find bile salts in any of them, contested this view, and explained that the jaundice in pylephlebitis was due to "an impaired consumption of bile arising from an abnormal condition of the blood generally." He followed this up by stating that the secretion of bile is diminished in pyæmia, a conclusion with which some other observers—Moos, for instance—do not agree. Jaundice, however, is not an invariable concomitant of pylephlebitis Where it does occur it varies in intensity, generally appearing at the commencement of the disease, with the onset of the rigors, and diminishing or altogether disappearing towards the end.

Coming to the other signs, I think one may at once dismiss the Widal reaction. Its presence is no proof that the case is one of typhoid, and its absence does not, I take it, definitely exclude that disease, and it is in relation to typhoid only that it can be of any material help. In no case that I am aware of has a diazo-reaction been looked for, and that, too, is manifestly open to objection, since it is given in most cases where there is abdominal suppuration, and in some where there is no suppuration at all. In some cases diarrhœa was a marked symptom, in many cases the motions being white, while in some they were typhoid-like in character. In others—about 32 per cent. of cases—no mention is made of diarrhœa, while in a few it is definitely stated that the patients were constipated. In one case the disease commenced with a severe attack of epistaxis, in several others the rigors were the first signs, followed almost immediately by the pain. The latter is usually stated to be almost paroxysmal, and is generally referred directly to the hepatic region. Referred pain and psychical symptoms occurred in several cases. In five there were disturbed sensations, in several there was delirium, and in one there were delusions. But in the majority of cases—and this is a point on which I would lay some stress—the patients are remarkably well between the attacks of high fever, and during the stages when the temperature is more or less sub-normal. In some cases they went out and declared themselves perfectly fit, only to sink, a few hours later, into an even graver condition than that in which they had previously been. Headache does not seem to be frequent—certainly never so severe as in a typical typhoid case where it did occur. Vomiting was present in 45 per cent. of cases, and in some the vomit contained both bile and blood. Hepatic enlargement was definite in the majority of cases, the liver dulness being increased in an upward direction, due, as Langwagen presumes, to the fact that the liver is usually bound down by adhesions in an early stage of the disease. Tenderness over the liver was present in the majority of cases, but in very few is there any mention of a sign on which early observers lay some stress, the marked unevenness of the liver to palpation. Splenic enlargement, which according to Frerich is a valuable index of the state of infection of the splenic vein itself, is variable, and, as Dr. Taylor pointed out, there is no means of differentiating between a typhoid spleen and the enlargement which obtains in pylephlebitis. Sweats and stomatitis, on both of which Roberts laid stress, were not mentioned in all cases. Sweats occurred in only 25 cases on my list, and stomatitis in still fewer. The sweats are described as being profuse, gummy or clammy in character, and often musty or sweet-smelling—a point of some interest when we remember that Sir Samuel Wilks has left it on record that one of our former staff was able to diagnose cases of hepatic disease by the patient's breath alone. Shifting abdominal dulness, ascites, distended abdominal veins, and hæmatemesis, all signs more or less characteristic of blockage in the portal system, are comparatively rarely seen in any well-marked degree, and are certainly not constant. In two cases a definite hepatic rub was heard, and in every case where it was tried local exploratory puncture was a failure. The other signs and symptoms, such as the

occurrence of systolic cardiac murmurs, of pleurisy, and enlarged axillary glands, seem to be useful in excluding, or otherwise, lesions such as septic endocarditis.

There remain, however, two most valuable subjects to be considered, and it seems to me that on these two only we may in a large measure depend in forming a diagnosis. The one is the character of the fever and the pulse, and the other is the presence of a leucocytosis. I will ask you to glance at the temperature chart of one case which exhibits the characteristic gradations and remissions of the temperature in a typical case, and to compare it with that of a typhoid chart, or even, if you like, with one of malignant endocarditis. The sudden rise and the equally sudden fall to a subnormal point are too striking to be overlooked. I am aware that in enteric rigors and intermittent temperatures are not unknown, but they are so rare that I have not found a chart which shows a typhoid rigor in order to compare it with these I have here. There is, however, one point which ought to be borne in mind, and that is, that such rigors, and such an oscillating temperature, are not unfrequently found in cases in which large doses of quinine and antipyrine have been given. I have unfortunately not been able to find a chart to illustrate this, and I cannot therefore deal further with it. What I want to lay stress on is that in suppurative pylephlebitis the most valuable individual sign is this spasmodic up-and-down temperature, accompanied with an almost uniformly high pulse—averaging, in the cases on my list, 135 beats per minute.

With regard to the leucocytosis, I believe it is generally accepted that it is of importance in cases of hepatic suppuration, and in all my cases in which a blood count has been made a well-marked leucocytosis, accompanied in one instance with an increase in the polymorphonuclear cells, was demonstrated.

Coming to the differential diagnosis, one finds that all sorts of diseases have been mistaken for pylephlebitis. It is rarely indeed that this disease has been diagnosed during life, and I think it speaks well for our hospital that several of our cases have been so diagnosed. But we have made our mistakes, and in Dr. Bryant's paper you will find a neat little list of them, some of the more interesting being pneumonia, and phthisis. There are, however, some diseases which would be very difficult to exclude in making a diagnosis. One of these is malignant endocarditis, and in his paper Dr. Taylor has given a most interesting case of a woman in which this disease very closely simulated suppurative pylephlebitis. In the cases on my list there are some which are analogous; one, for instance, in which there was hæmaturia, and hæmorrhages under the skin, together with an alteration in the cardiac sounds. Then there is typhoid, in considering which the presence of a leucocytosis, and the character of the temperature and the pulse will help us, and malaria in which the history might be of value. A possible mistake—though I do not know that it has yet been made—is acute hæmorrhagic pancreatitis, which, in a case, the notes of which I have lately been reading, ran a course very like that of a suppurative pylephlebitis. A possible diagnosis, as mentioned by Traube, is always catarrhal jaundice, which according to him is not unfrequently accompanied with enlargement of the spleen and liver, and with intermittent fever. An appendicitis it would certainly be difficult always to exclude, and it seems to me that an even more difficult feat would be to exclude a cholangitis, especially if there were previous symptoms of billiary trouble, and a history of colic. Perforated gastric or duodenal ulcer may give rise to very similar symptoms, and in one case the disease was mistaken for typhus. But the most serious mistake is undoubtedly to consider the pleurisy or the pulmonary symptoms which so often accompany the disease as primary lesions, and to lose sight of the abdominal condition altogether. Thus in one case in our own wards a diagnosis of phthisis was made, and in several recorded cases diagnoses of pleuritic effusion were given while the abdominal condition was entirely overlooked.

I have no time to spare for the many interesting questions to be raised in a discussion as to the pathology of the disease. It is perhaps the most interesting of the many points with regard to pylephlebitis, and the one, also, which has been most attended to by those who have considered the disease. As you will have noticed from my definition, I have classed portal pyæmia and suppurative pylephlebitis together, and it appears to me that, clinically at least, there is no difference between these two conditions, whatever may be their pathological differences. That is a question I leave to your discussion, as also the interesting point whether or not the disease starts essentially as a thrombus in one of the lower radicles of the portal vein, from whence infection is rapidly carried to the liver radicles by means of the blood current of the splenic vein as first asserted by Wunderlich, and why metastatic suppuration is so excessively rare in this disease. It has indeed been found in the muscles, in the abdominal viscera, and in the brain, but in very few cases only. Another and equally interesting point is the bacteriology of the disease, especially in its relation to typhoid. In the cases in which a blood examination has been recorded B. coli, various streptococci, and in one case S. pyogenes citreus have been found. In no case, I believe, have typhoid bacilli been looked for. When we consider how long these latter organisms may remain latent in the gall bladder, for instance, it is excusable to argue that they might contribute towards infection in the portal system, and it is equally excusable to refuse to accept the evidence of the Widal reaction as contributing materially towards elucidating the diagnosis.

Finally, I come to the prognosis and treatment—two most interesting points which I must treat very briefly. All authorities agree that the disease is beyond treatment. Frerish, with a decisiveness which will appeal to some of us, says it is "hopelessly fatal"; Clements regards it as "always terminating in death": Dr. Bryant knows of no authenticated cases of recovery, and one observer states that with your diagnosis "your usefulness to the patient ends and that of the priest

begins." One, and one only, expression of opinion implying a shadow of a doubt on the necessarily fatal termination of the disease have I been able to find, and that is in the report of a gentleman who had three cases, and remarks pathetically that he was "unfortunate enough to lose them all." The duration of the disease is measured in days, rarely in weeks, and indeed one observer has laid it down that a case which lingers on for longer than two months is not one of suppurative pylephlebitis. Excluding one case on my list in which the duration is given as having been six months, I find that out of 56 cases the shortest lasted one day, and the longest seventy-five days, the average being just over twenty-seven days from the commencement of the acute symptoms. The longest cases have been those in which an appendicular lesion was the cause of the disease; the quickest those in which the liver or gall bladder was obviously the point of infection. In our own wards, I find that the treatment adopted has been mainly symptomatic. Quinine in large doses and sponging have been tried for the pyrexial symptoms, in many cases with marked benefit, and Tinct. Iodi seems to have been most useful for the vomiting. In one case anti-streptococcic serum was injected, but without much result. It appears to me that the best treatment is, after all, early and thorough surgical interference, though the objections to such interference are sufficiently obvious. To begin with, the disease is not always diagnosed until it is so far advanced that operation is out of the question, and secondly, in those few cases in which laparotomy has been performed in the wards here, no great benefit seems to have resulted from it. I would submit, however, that, provided the diagnosis is made sufficiently early, surgical treatment does hold out some hope of success. In one of Carrington's cases it was found at the autopsy that the pylephlebitis was on the way to curing itself, and it is imaginable that there are some cases in which the process of spontaneous cure has gone even farther. Let me remind you of the success which has attended the surgical treatment of lateral sinus thrombosis since 1879, when Kraussold first proposed ligature of the internal jugular vein. Is it not possible that some such method might be used with advantage in coping with suppurative pylephlebitis? There are many points in favour of it. In its primary stages the clot is small and perhaps confined to one of the smaller portal radicles. Between the attacks of pyrexia the patients are in a much fitter state to stand operative interference than patients with a perforated typhoid ulcer, and although the risks and dangers, not to speak of the difficulties, of any operation on, let us say, the inferior mesenteric vein, must be great, they appear to be justifiable in view of the hopelessly bed prognosis—much more justifiable, at least, than the persistent and futile dosing of the patient with drugs which are admittedly of little use.

As the bibliography on the subject is interesting the following partial list may be useful for reference:—

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UNRECORDED CASES.

82. Dr. Walker's case (1905).—M. 16. Attacks of abdominal pain, referred to umbilicus, vomiting and diarrhœa. Headache, rigor, profuse perspiration, great thirst, perpes, stomatitis, anxious expression, intermittent pyrexia with alteration of times when the temperature was subnormal. Rigid abdomen, liver not enlarged, tenderness over hepatic area. Cutaneous hyperæsthesia. 7500 white corpuscles per c.mm. Heart sounds normal, urine normal. Admitted October 30th. Later distension of abdominal veins, white corpuscles, 2250. Blood gave pure cultivation of Staph. pyogenes citreus. Increase of liver dulness, marked wasting, slight icterus. Gmelin's reaction given by urine. Operation after negative exploration with needle. Softening areas found in lung, these were incised with no result. Death in twenty-four days. At autopsy, appendicular inflammation found, with perforation into cæcum, multiple abscesses of liver, and well-marked suppurative pylephlebitis.

83. Mr. Lane's case reported by Mr. Mollison.—M. 59. Admitted April 20th for "hepatic abscess." High temperature, no jaundice, rigors, thirst, sweats. Unfortunately the report is lost, and no accurate details can be obtained as to the pulse rate, temperature, etc. Laparotomy. At operation a very foul-smelling collection of pus evacuated round the appendix. Death in twenty-four hours. At autopsy well-marked pylephlebitis was found with hepatic abscesses, consequent on the appendicular lesion.

84. Dr. Fawcett's cases.—M. 26. Old history of Malta fever. Pain and vomiting, bleeding of gums, herpes, no other evidence of rigor. Pulse rate rarely below 108. Distended abdominal veins. Duration 18 days. Pus found in portal vein and general pyæmia, with hepatic abscesses.

F. 18. Violent pain and giddiness, coming on suddenly, signs of pneumothorax, urine normal, white count 20000, liver palpable. Operation. Second white count showed 54000 whites. Rigors. No definite jaundice, passage of pus per rectum. Duration 7 weeks. Autopsy, gastric ulcer, subdiaphragmatic abscess, multiple hepatic abscesses, abscesses of pancreas, and pus in portal vein.

85. Dr. Shaw's case.—M. 22. Old appendix trouble. Enlarged liver, rigors, albuminura, pleurisy, vomiting, sudden pain, diarrhœa, white motions, jaundice, cough, restlessness, hepatic tenderness, temperature 107°, pulse 120, spleen not felt, whites 16000, polymorphonuclear cells 80 per cent., pulse dicrotic 130, Widal negative. Duration twenty-five days. Autopsy, infarcts in spleen, pus in portal vein, sloughing end of appendix.

86. Dr. Pitt's case. M. 19. Sudden pain, blood and albumen in urine, bowels open, foul breath, abdomen rigid, systolic bruit, Widal negative, leucocytes 23000, jaundice. Autopsy showed pus round pancreas and a suppurating appendix and pylephlebitis (?).

87. Dr. Beddard's case.—M., 22. Tin-plate worker, Admitted on July 1st for severe abdominal pain. Had previously been strong and healthy. Patient's father died of "intestinal growth." Six weeks before admission patient was seized with sudden pain, diarrhœa, and faintness, and vomited once. A tentative diagnosis of enteric was made, and he was sent to a fever hospital. There he had rigors and an irregular temperature, and his serum gave no Widal reaction. On admission into Clinical he was pale and wasted, but had no pain or tenderness. His abdomen was tense and dull on the right side. Pulse 130. Temperature 99°. No sign of jaundice. Liver dulness from fourth rib to three inches below costal margin. Nothing felt per rectum. Tongue furred and tremulous. Both bases dull, and moist râles heard over lower lobes. A pleuro-pericardial rub and an apical systolic bruit were detected. Urine contained a trace of albumen. Blood-count showed 9000 whites. It was decided to operate, and the abdomen, which was found to be full of thick fluid, was thoroughly flushed out. No thickening or perforation was found. Patient died on July 5th. At the autopsy, pus was found in the portal vein, the hepatic duct contained semi-purulent fluid, the end of the appendix was adherent to the ascending colon, and the liver was riddled with abscesses.

Appointments.

Civil.

BALL, J. BRAMLEY, L.D.S.R.C.S. Eng., has been appointed Dental Surgeon to the Royal Hospital School, Greenwich.

STAMFORD, R. B., F.R.C.S. Edin., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Certifying Factory Surgeon for the Loughborough District of Leicestershire.

Naval and Military.

Surgeon A. J. WERNET, R.N., has been appointed to the *Cambridge*.

Colonel E. W. SAUNDERS, C.B., R.A.M.C., is granted the temporary rank of Surgeon-General whilst officiating as Principal Medical Officer, Eastern Command, India.

Captain H. D. PEILE, I.M.S., whose services have been permanently placed by the Government of India at the disposal of the Government of the United Provinces, is appointed Superintendent of the Central Prison, Fatehgarh.

From the Gazette's Special Pathologist.

T. C., BLACKPOOL.—This tumour is composed of indurated breast tissue, the result of chronic mastitis. The cystic spaces are caused by pressure of new fibrous tissue on the smaller ducts. Although there is some epithelial proliferation forming small papillomatous excrescences into the larger cyst, there is no evidence of malignancy in the specimen. PATHOLOGIST.

Reviews.

The price of books submitted for review should in every case be stated.

Diseases of Children. By Henry Ashby and G. A. Wright. Fifth edition. (Longmans, Green & Co.) Pp. 920. Price 21s. net.

This is the fifth edition of the popular work on Diseases of Children. Its excellence is attested to by this evidence of its popularity, and being written by a physician and a surgeon in conjunction from their personal experiences, is thoroughly practical. The hygiene of infants and children is well described, and the popular fallacy of teething as the starting-point of all ills is well commented on.

We are surprised to see such a large dosage as three to four ounces of brandy ordered for a child of only four or five years old, as, according to some authorities, even an adult cannot use more than two ounces in the twenty-four hours. The pages on disease of the respiratory and digestive organs are full of value: the authors are quite decided in operating on all cases of intussusception, and not trusting to blowing up or such-like treatment. The section on rickets contains much interesting matter: in talking of bow-leg they say it is much commoner in one leg, the other at the same time being the subject of knock-knee. The authors express themselves strongly in favour of forcible straightening without external wound in cases of bow-leg and knock-knee, and have had good results from this method of procedure.

On the vexed question of Intubation versus Tracheotomy, they say that intubation can only be used when there is little or no membrane. They instance a case in which the tube pushed the membrane before it, which resulted in immediate suffocation.

Tuberculous joints are, of course, described at some length, erosion of the knee being strongly recommended; indeed they say that excision is so seldom required that it is unnecessary to give details of the operation. As a point of practical interest we see that pure turpentine is the best thing for a slowly-healing sinus. On the other hand, in hip-joint disease, if it is progressing in spite of adequate treatment, they advise *timely* excision. The operation of excision of the hip-joint is in disrepute because it is generally done too late.

In the treatment of club-foot in its various aspects, Dr. Little's tin splint is strongly recommended: the simplicity of the apparatus is very pleasing. For the treatment of flat-foot the only form of apparatus used is an artificial muscle.

There is an excellent chapter on anæsthetics for children by Dr. Wilson.

One fault we have to find is the very inconvenient shape and size of the book.

The whole is well printed and full of useful diagrams, and we can safely recommend it to the notice of our readers.

Materia Medica. By C. R. Marshall, M.D. (J. & A. Churchill.) pp. 635. 10s. 6d.

The subject of Materia Medica is not usually of much interest to students of medicine, nor do we think that it will find any more favour after a perusal of this book. An endeavour is made to lighten the labour of the student by printing the less important matter in small print; this we think is wrong in principle, tending to make the student scamp his work, and also leading to some confusion and disjointedness in sequence of ideas. The book is as usual divided into Inorganic and Organic substances. As regards the former the author takes the line of the Ionic hypothesis of substances in solution in discribing their action. The organic drugs are arranged in groups according to their active principles, that is, on a chemical basis, and this being a very uncertain quantity, leaves us in considerable doubt as to the wisdom of the arrangement. In regard to the actual text, though most of the important things are mentioned, yet the whole strikes us as being too discursive and sketchy. There is little or no mention of the preparation of drugs, just a bare outline of their characteristics, and the active principle is mentioned. The pharmacology takes up the greater part of the work, but even this is by no means lucidly written, the parts of the body on which the drug acts being for the most part but hinted at; for example, with the purgative drugs, it merely mentions the purgative action without indicating the part of the bowel on which it acts. We are surprised to find in an up-to-date work that there is no mention of Eucaine or Adrenalin.

There are numerous illustrations of the drugs "likely to be met with in the Materia Medica museum." We very much doubt if the student of average perceptive faculties would be able to identify many of the drugs from these drawings. It would be better to omit them altogether.

The book is got up in large type on very heavy paper, making a very burdensome volume. On the whole we do not see the necessity for the work, nor can we recommend it in preference to the existing standard works on the subject.

The Theory and Practice of Medicine. By Frederick T. Roberts, M.D., etc. Tenth Edition. (H. K. Lewis.) 1,368 pp. Price 26s. net.

This is the tenth edition of the well-known text-book of medicine by this author; that it has survived nine editions points to the great popularity which it has attained, and in our opinion deservedly so. Some time has elapsed since the ninth edition was published, and so there have been considerable alterations and additions to the book in accordance with the progress of medicine in modern days. The greater part of the work has been founded on the personal experience of the author, hence the greater value of what one finds in it; but at the same time the investigations of others have been by no means neglected, as numerous references in the text testify.

At the beginning of the book the author deals with general pathological changes, but as this section partakes more or less of the nature of a catalogue, its omission

would not have damaged the book seriously. He then treats of some general symptoms, but this gives rather confusing ideas, as for instance "dropsy," appears in no less than three different places. The usual classification is adopted, specific fevers and general diseases being dealt with first. These are discussed at considerable length for a text-book, and certainly give an excellent idea of the symptoms and course of the diseases; the rashes are well described. Treatment is only discussed shortly, and, indeed, all through the book seems to lack many points of practical interest that might well be included. In the remainder of the work the systems are dealt with in turn. The chapters on the Lungs and Heart are good and quite up to date, but in the treatment of acute endocarditis the author, in our opinion, does not give enough prominence to "Rest." There is no indication given as to the length of time a patient should be kept in bed or when he may be allowed up. The question is constantly being asked in the wards, and more might with advantage have been said about it.

In the section on abdominal conditions the chapter on the Peritoneum is all too short. Appendicitis is discussed at length, but the operative treatment is almost entirely omitted.

The book is well written and easy to follow, and we can recommend it as being perfectly sound in theory and practice. Being divided into two volumes it is much more comfortable to read than the majority of text-books.

Sport.

Rugby Football.

GUY'S 2ND XV. v. LONDON WELSH 2ND.

This match was played at Honor Oak Park on Saturday, January 20th, and resulted in a victory for Guy's by 1 goal and 2 tries (11 points) to 3 tries (9 points). The ground was in rather a greasy condition, but a fast and exciting game throughout took place. The Welsh were one short in the scrum, which may have accounted for the superiority of the Guy's pack in obtaining and heeling the ball. The Welsh scored a try in the first five minutes, but failed to improve upon it. Play was then transferred to the Welsh twenty-five, and in a melée close to their goal-line, Ball obtained possession and scored, Munden failing to convert. After this there was very even play, until after a fine bout of passing by the Welsh three-quarters, they scored close to the corner flag; the kick failed. Guy's then pressed, and the Welsh were forced to touch down. From the drop-out Munden received the ball cleanly in mid-field, and ran straight through, grounding the ball between the posts, the same player adding the major points. Half time was then called, Guy's leading by 2 points. On play being resumed, both teams played their hardest, tackling being vigorous on both sides. The Welsh were the first to score, but failed to convert. For the last 15 minutes play was confined almost entirely to the Welsh twenty-five. Guy's looked like scoring several times, until Palmer got over close to the corner flag. Munden failed to convert. Time was called soon after this. Team:—

GUY'S.—T. Lewis Jones (back); B. H. Palmer, E. L. Lloyd, G. C. Covell, R. S. de C. Bennett (three-quarters); W. T. Clarke, C. D. Roberts (halves); M. E. Ball, D. Stout, D. Reynolds, M. M. Munden, G. B. Cockrem, R. Stout, E. L. Elliot, L. L. C. Reynolds (forwards). Referee, L. J. J. Orpen.

Association Football.

GUY'S v. CASUALS.

This game was played at Honor Oak Park on January 17th, and resulted in a win for the Hospital by 2 goals to nil.

The heavy state of the ground made accurate football impossible, but a hard and even game was witnessed. Our visitors brought down a fairly good team, including R. G. Wright, the old Cambridge forward. The Hospital made a change in the usual order of playing, Zorab taking his new position as centre forward, and Townrow coming in at half; the experiment was quite a success, the forwards combining far better than usual, and the team promises to be quite strong in this department.

Our opponents kicked-off against the wind, but Guy's soon began to press, and Zorab scored after ten minutes, as the result of a good combined run. The pressure was well maintained, Barker and Barnett being prominent with some good dashes down the wing. Shortly before half-time, Zorab again scored, the ball rebounding from the goal post after a hard shot by Denning. Half-time arrived with the score 2–0 in our favour; we might have scored more had our shooting been better.

In the second half, the Casuals, aided by the wind, were more aggressive, Wright being especially prominent, but the Guy's backs played soundly, and Wood did all that was required of him in good style. Our forwards were occasionally very near scoring, Witts having bad luck with a fine shot, but towards the end they appeared to be suffering from lack of condition. No further score was added, and the game ended in our favour 2–0.

Birth.

BROWN.—On January 4th, at Carlton House, Gloucester, the wife of Walter Brown, M.B., of a son.

Deaths.

EWART.—On January 10th, at Dyke Road, Brighton, Sir Joseph Ewart, M.D. St. And., F.R.C.P. Lond., Deputy Surgeon-General I.M.S., in his 75th year.

TREHARNE.—On January 10th, at Pontllanfraith, John Llewellyn Treharne, M.R.C.S., L.S.A., J.P., aged 54.

ED.—H. C. C.

GUY'S HOSPITAL GAZETTE.

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Passim.

IT was in the wisdom of Providence that February was made the shortest month in the calendar—it is certainly the dullest. The hospital year always makes a notable start, so that for the first few weeks the honour of the company of the least distinguished among us is requested at quite a number of inaugural dinners and functions which compete for favour. Its close, too, is marked by various ceremonies at which we are accustomed to congratulate ourselves upon our remarkable achievements. But between these periods of thanksgiving there is a long and dull time when nothing of interest ever seems to happen, when in our well-regulated Hospital things go so smoothly that there is nothing but monotony to chronicle.

THE Annual Dinner of the Debating Society was held in the College Dining Hall on Saturday, February 3rd, over fifty members being present. Dr. Savage, the President, was in the chair, and in response to his toast, which was proposed by Dr. Craig, he gave an interesting and amusing address on his "legal experiences." It is a pity that there was no music after the dinner; those who had promised to perform disappointed at the last moment. In our next number we hope to print Dr. Savage's address.

THE Ladies' Evening of the Debating Society is to be held in the College Smoking Room on Saturday, February 17th, at 8 o'clock. Dr. Savage has again kindly consented to take the chair. The motion, which is to be proposed by Mr. G. Wacher, is "That this House deplores the luxury of the present age and advocates a return to the Simple Life." The opposition will be led by Mr. Mann. It is hoped that there will be a good attendance and plenty of speakers.

WE have received notice from those responsible for the annual boxing and fencing competition that owing to the lack of entries they have been reluctantly compelled to abandon the competition for the year. Such a state of matters is particularly unfortunate, and those who have worked hard in the interests of the boxing and fencing are not unnaturally a little annoyed. Dr. Pavy has made his usual generous offer to provide the prizes for the competition, but this time without effect. At one time it was thought that the well-known skill of one or two hospital boxers might be the reason why others held back—it can never be amusing to stand up only to be hit and to provide the necessary opposition—but as soon as this was suggested several of last year's winners intimated that they were

quite willing to stand aside and leave the competition to others. Even this failed to produce a reasonable number of competitors, and under the circumstances it has been decided to abandon the competition and to substitute for it a display, at which several well-known boxers from outside will appear together with the best of the hospital talent. It is hoped that Dr. Pavy may take the chair, and that Mr. Higgens may be induced to box. The date is not yet definitely fixed.

The Chaplain is having considerable difficulty in completing the list of names for the Chapel Memorial. Everybody seems to take it for granted that somebody else is sure to let him know of this or that error or omission. For instance, through an oversight the name of a student who died little more than a year ago, who was widely known, and liked and respected by all with whom he came in contact, was left out of the list; and yet, although almost all of those who were his friends are still at Guy's, it was left to an old Guy's man, now living abroad, to write and call attention to the omission. It is earnestly hoped that all who are able to make corrections, or point out omissions in the lists which have appeared from time to time in the Gazette, will not be deterred from letting Mr. Bown know. At present information is wanted on the following points:—

1. The Christian name of a student named Sweetlands, who died in 1869.
2. The date of the death of Thomas H. Green.
3. The Christian name and date of Iles.
4. The Christian name of Titley, 1882.

The Eleventh Annual Dinner of the Dental Society took place on February 3rd. One hundred and sixty members were present, among them Mr. Cosmo Bonsor and Sir Cooper Perry. Mr. Hopson, one of the original founders of the Society, occupied the chair, and a most enjoyable evening was spent.

The various musical societies of the Hospital have recently decided upon effecting a grand "combine." Under the name of the Guy's Hospital Musical Society are included the Nurses' Choral Society, the Students' Glee Club, and the newly-formed Orchestral Society. The Society intends to give a Concert at the end of April, or early in May, the entire profits of which shall go to the Million Shilling Fund.

We are glad to take this opportunity of congratulating Dr. Louis Stamm, of Streatham, an old Guy's man, on the result of his recent law suit. Dr. Stamm attended a female patient who, shortly after eating shell-fish, developed that indefinite combination of symptoms which we know as typhoid fever. Being of opinion that, for the safety of others, it was necessary that his patient should be removed to the fever hospital of the Metropolitan Asylums Board, Dr. Stamm signed the necessary certificate. After a stay of seventeen days she was discharged, the prevailing opinion at the hospital being that the case was not one of typhoid fever, but of influenza, although, as the Medical Superintendent of the hospital stated in evidence, the matter was doubtful to the last. The patient, hearing of this difference of opinion among experts, proceeded to sue Dr. Stamm, claiming damages for the loss of time spent in hospital, and for the injury done to her property during the disinfection of her house.

The result of this was that Dr. Stamm was put to all the trouble and expense of defending an action which must appear to everyone obviously unjustifiable. It is true that the Judge, the Hon. Arthur Russell, stopped the case almost at once without calling on the defence, stated clearly that Dr. Stamm was entirely free from blame in the matter, and awarded costs on the largest possible scale. At the same time the mischief, to a large extent, was already done, and Dr. Stamm had already been put to a great deal of worry and expense for doing what was obviously his duty. It is time that medical men should be protected against the inconvenience of such actions at law.

The postponed cup-tie against Bart.'s took place at Richmond on January 29th. Rain began to fall ten minutes after the start and continued until the game was nearly over. The result

was that the ground became so soft and sodden and the ball so greasy that accurate play was impossible. Guy's got going at a great pace, and Bart.'s, in the light of their play later on, made a surprisingly weak start. As a result of a fine round of passing Alcock scored after five minutes' play, and almost immediately afterwards Pinching went through with a try. Ultimately this proved to be all the scoring, the game becoming more and more confined to the forwards as the ground got wetter and wetter. Guy's were good in the loose, but seemed incapable of getting the ball in the scrum. Gibson played a fine game at back, and everyone will regret his bad luck in having since met with an accident which will keep him out of football for some time.

On Thursday, February 8th, we won our second tie against King's College. This match was also played in drenching rain and on a wet ground. Guy's were the better team all through, although King's put up a sound defence, and we ultimately won by 11 points to nil. Apparently the final is again to be fought between Guy's and the London, and we shall hope to retain the cup.

It is rumoured that some of the Medical wards are to be closed for cleaning and repairs during the spring, and that while each ward is out of use its patients are to be housed in the small relief ward at the top of the surgical building. If that is so, the number of medical patients will be considerably decreased. We are told by our predecessors that the responsibilities and worries of house physicians during take-in have almost ceased to exist, since, with the increased number of beds at their disposal, they are able to settle all their problems by the simple expedient of taking everybody in. Whether this is so or not, the temporary loss of twenty or thirty beds is sure to make itself felt. If anything is to be blamed for the loss of responsibility which we are told the present day resident suffers, it should be the telephone, an invention which must have made an enormous difference to the working of a hospital. A house surgeon or house physician must have been very certain of the urgency of his case before he sought a personal interview with a member of the Staff, at 2 a.m., in his pyjamas, or carried him off in a cab to confirm his diagnosis. Perhaps these grave responsibilities under which our predecessors laboured are sufficient to explain why they look so sad in the photographic groups they have left behind them as mementoes.

Overheard at Out-patients:—

Nurse.—Now, Tommy, stop crying. Look at that little girl over there, she isn't crying.

Tommy.—She ain't got no pain.

Nurse.—How do you know she hasn't got any pain?

Tommy.—'Cos she ain't crying.

Change of Address.

Dr. R. W. Allen, from Guy's Hospital to 58B. Wimpole Street, W.

Dr. J. Martin Bickerton, from 6, Shaw Street, Liverpool, to 40, First Avenue, Hove, Sussex.

Mr. A. R. Durant, L.D.S., from 10, Dunsmure Road, London, N., to 82, Dutoitspan Road, Kimberley, Cape Colony.

Mr. A. Alan Forty, L.D.S., from Guy's Hospital and 6, Weymouth Street, Portland Place, London, W., to 26, Park Square, Leeds.

Dr. C. H. Glenn, from 18, Barclay Road, Croydon, to Muster Green, Haywards Heath.

Dr. T. D. Lister, from 77, New Cavendish Street, W., to 50, Brook Street, Grosvenor Square, W.

Dr. Stanislaus Reader, from Guy's Hospital to Westgate End House, Wakefield.

Dr. W. O. Roberts, from 8, Church Road, Tunbridge Wells, to Lancaster Road, Carnforth, Lancs.

Deputy Inspector General Everard H. Saunders, R.N., from Royal Victoria Yard to "Tsu Shima," Grove Park, Lee, Kent.

Mr. H. Snell, L.D.S., from Guy's Hospital, to 14, Commercial Road, Woking.

Mr. R. H. Jocelyn Swan, M.S., F.R.C.S., from 76 to 75, Wimpole Street, W.

In our last issue it was erroneously stated that Dr. W. Evelyn Alston, had moved from 22, Bentinck Street, W., to 15, Fitzroy Square, W.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

The Treatment of Heart Disease.

CLINICAL LECTURE BY FREDERICK TAYLOR, M.D., F.R.C.P. December 14th, 1905.

GENTLEMEN,—I propose to make some remarks this afternoon about the treatment of heart disease. It is true we have not had a great deal to do with cases of heart disease during the four weeks I have spent in the Clinical wards this time, but it was suggested to me as a subject which would interest some, and especially with reference to one case which occurred in my ward some time ago, though it was not very long under my own care.

Of course our subject is a very large one, and an hour is not sufficient to discuss it properly. It is also one upon which numerous writers have lectured and written, so I need only take to-day a very limited part of it. I shall only deal with the treatment of heart disease when it has become really disease. For instance, I shall not discuss the treatment of a valvular murmur. What I want to speak of is the treatment of that inadequate action of the heart which makes the person suffer. A patient may have rheumatic fever, with endocarditis, and he may appear to recover from it, but afterwards he is found to have a murmur; but he may have no symptoms, and may not be aware that there is anything the matter with him. There are individuals who go to insurance offices to be examined for life assurance, and they are found by the examining medical officer to have a murmur of which they had been entirely unconscious. You may have seen cases of people who are hard workers, such as blacksmiths, who are unaware that anything is wrong with the heart. The same may be said of gentlemen engaged in athletics and sport. These are cases which do not want the treatment that I shall discuss this afternoon. It is true they must consider their future carefully, and they should be advised in regard to it.

I propose to deal with the conditions in which the patient knows he has something the matter with him. You probably know that the reason why a person suffers is that the defective condition of his valves leads ultimately to failure in the action of the muscular substance of the heart. The heart is a muscular organ, and it is what it can do in propelling the blood through the body which concerns us all. This propulsion of the blood depends upon the perfection of the valvular apparatus. If that apparatus is diseased, the circulation is imperilled; but the difficulties do not ensue at once, because of the great reserve power of the heart which is shown in its hypertrophy. When that is exhausted the patient suffers, and we speak of failing compensation. So long as compensatory hypertrophy is sufficient, the patient may not suffer.

The principles of the treatment of heart disease can be definitely divided into three heads, and I propose to say something on each of them.

First, there is the question of rest; and rest is a very important factor in the treatment of heart disease. Very little time need be spent in arguing that rest is desirable in heart disease. I am speaking of the failure of the muscular apparatus—the myocardium—to compensate for the lesions in the valve, whether obstructive or regurgitant. The circulation of the blood is wanted first for the nutrition of the body and the maintenance of its healthy functions. The second desideratum is that the heart shall supply blood for the muscular system, to subserve locomotion, and also for purposes of brain work. These two are not the first essentials to life. The first is the vegetative function, or the mere act of living; the second and third include the enjoyment of life and the performance of functions indirectly or otherwise useful. When a heart is incapacitated, therefore, the second and third function are those which it can well be relieved of. By keeping the patient properly at rest, the work of the heart is concentrated on the act of living. Not only is that a physiological argument, but it can be easily verified. You know that a person who is moving about, or even standing, has a quicker pulse than one who is lying down, showing that the demand of the heart is greater in the former case. But that argument, though so plain to us, does not at first appeal to the general public. I lay stress upon it because not only is it the right thing to keep the patient at rest, but you have a right to demand that your patient shall agree with you in it, and that he should not expect to lay the responsibility of his treatment upon you unless he falls in with your views on the question of rest. Numbers of patients expect to be cured with nothing more than a "bottle of physic." They expect your advice to be converted into terms of bottle glass and coloured water, and after coming into relation with those for two or three weeks they expect to be cured. Now, the patient with heart disease should rest absolutely; he should be properly nursed and

have everything done for him. He must not go to bed with the idea that he can get up for two or three hours in the afternoon, or rise at any time to fetch a book, or poke the fire. The results of such complete rest are very plainly seen, both in the wards and in private patients. You may have a patient coming in with heart disease, and you may give the usual remedies for that complaint, and in the course of a week or two the patient may be very much better. Then you may think, especially if you are an eager student and want to see practice, "It is time this patient went out." You perhaps get that patient up, and if you are too hasty you will find he will get bad again, and the bed will remain occupied by him a week or two longer than you anticipated. The too eager house-physician, or clinical assistant, may get a patient with heart disease out of bed too soon and, may suffer in reputation accordingly.

It is often noticed that children suffering from various affections of the heart are very little amenable to treatment other than rest. Frequently one sees that ordinary drug treatment has little or no effect upon them, and the only beneficial thing for them is prolonged repose in bed. Sometimes it is weeks and weeks before they show improvement. There is a girl in Clinical ward with a large heart and a double mitral murmur, who illustrates this fact. There are cases who have been under treatment for many months, who have been relieved over and over again, and have got up and been about again; and who then have arrived at a stage in which they cannot remain out of bed from morning till night, even for a few days. If you get them well enough to be about, they soon come back again, and they seem as if they can only live by the greatest care and attention on the part of other people.

The next factor in the treatment of heart disease is what we may call depletion—the unloading of the venous side of the circulation. It is clear that when we speak here of depletion we do not refer to the arterial side. In most of these cases the arterial side is not full enough; there is low arterial pressure throughout the body, but a higher venous pressure than normal. This depletion can be met in several ways. You can use such remedies as will act upon the secretions, and thus draw off a certain amount of fluid from the body in that way. For instance, purgatives are remedies which you constantly want in heart disease, and from which you can derive much good. Diuretics, when you can get them to act, will operate in the same way. Many of you know that diuresis follows necessarily upon the improvement of the cardiac action, because the increased arterial pressure is felt in the kidneys. But if you know of any remedies, other than these cardiac drugs, which will produce diuresis, they may be useful in depleting the venous circulation. Similarly with diaphoretics, though they are not much used in this connection. Still, you may find acetate of ammonia of value.

A more direct means of depletion than any I have mentioned is venesection. This, in certain stages of heart disease, is undoubtedly very valuable; but you cannot continue it day after day, as you can diuresis or purgation. Still, when there is actual stagnation of blood in the heart, or a threatened cessation of the heart's action due to engorgement of the right ventricle, then drawing off blood from the right auricle and ventricle does much good. The cases in which venesection seems justifiable are those in which the patient has had heart disease for some little time, perhaps advanced mitral stenosis, with corresponding dilatation of the right ventricle and auricle; in which there is œdema and congestion at the bases of the lungs, perhaps enlargement and pulsation of the liver, pulsating jugulars, ascites, albuminuria; and where the pulse is rapid and can scarcely be felt because it is so feeble. It is not usually necessary to do that when the patient first comes into the hospital; perhaps purgatives and digitalis will do so much good that venesection is not required; but it should be done if the patient continues very ill and a fatal termination appears to be imminent. It is because there is threatening paralysis of the right heart by its engorgement with blood that one tries to attack it by opening a vein in the arm, or even in the neck, if a quick result is required.

There is also another negative form of depletion which one always employs in these cases. The food of the patient must be small in quantity, and it must be in a semi-fluid and easily digestible form, such as milk, perhaps peptonised, and beef-tea. The object is to keep the stomach in a relatively undilated or undistended condition, and to avoid putting too much work on the absorbents. The mere mention of that will be sufficient for you. As I have said, you do not want to deplete the arterial side, but rather to fill it.

But there is one kind of case in which this question does arise, and that is where the heart is not suffering from valvular disease, *i.e.*, from an original rheumatic affection of the valves, but from the high pressure of Bright's disease. You

know that in chronic granular kidney you have extreme high tension in the arterial vessels, and as a consequence of that the heart is put under a strain, which ultimately leads to incompetence; which is practically the same thing as the incompetence brought about by valvular disease. It is well known that cases constantly occur in which one finds it difficult to determine whether the case is one arising primarily from Bright's disease and secondary heart failure; or whether it was first heart failure, and the albuminuria is a result of that failure. Where the heart is secondarily affected as the result of granular kidney, the tension is high early in the case. There does occur a stage in which the tension is low, but that is towards the end of the patient's life. So that the question might arise in such a case whether depletion might take place from the arterial system. The method of depletion, even in those cases, has generally been venesection; *i.e.*, in the desire to lower the pressure on the arterial side, blood was drawn off from the venous side. That is not very logical, nor extremely successful, because it needs a considerable loss from the venous side to reduce the arterial pressure. In the course of my duties as an examiner I have been struck by the fact that a certain number of candidates, when asked about the treatment of heart disease, made much of reducing the arterial pressure, as if they thought that high arterial pressure was an important disadvantage which patients suffered who had ordinary heart disease. That is an idea which is foreign to my conception of the disease, and it is obvious that in most cases it is the wrong way to look at it. The difficulty which exists is the low arterial pressure which the valvular disease and the incapacity of the heart bring about.

I now come to the third principle in the treatment of heart disease—the employment of so-called cardiac tonics. First with regard to digitalis. Whether you call it a cardiac tonic or a cardiac stimulant I do not think matters very much. There is no doubt it is a very valuable remedy, and that it has very great influence on the action of the heart in some forms of heart disease. There are two kinds of cases in which it is particularly valuable. The first is where there is mitral stenosis, with or without regurgitation, in which the heart beats at 100 or more in the minute and irregularly, and the pulse is very small and deficient in tension. With such a heart, especially when the seat of mitral stenosis, digitalis, in a great number of instances, gives very prompt relief, slowing and strengthening the pulse, and making it more regular. It is also sometimes useful in simple tachycardia, where the pulse may be 150 or 160 per minute. But the cases are not common, whereas the mitral cases are exceedingly common. I would lay stress on this, that in giving digitalis you ought to be prepared to give it in the proper doses—I do not like to say large doses. The Pharmacopœia gives as the limits from 5 to 15 minims. The dose given by previous Pharmacopœias was from 10 to 30 minims, and the upper limit was doubtless too large; but the tincture has the same strength as it had many years ago, and I think the upper limit might well have been extended to 20 minims. Perhaps 10 minims may be considered an average dose; but in these very bad cases, where the patients are very ill and suffering greatly, and requiring prompt relief, you must be prepared to give the maximum dose which the Pharmacopœia suggests; and I go further and say you may give a larger dose in some of these cases, even 20 to 30 minims, and you need not do any harm. A dose of 10 minims three times a day in a bad case is not enough; it will not produce at all promptly the results you require. No doubt in course of time, in two or three days, you may get the same results with smaller doses, but you are justified in trying to get results sooner than that. Of course you watch the effect of it; you do not give the medicine and go away for a week, but you see the case probably twice a day, and should have a nurse to watch and report to you.

For many years it has been said that digitalis is a cumulative drug or poison. That word "cumulative" weighs upon our minds, and, I am sure, frightens many people unnecessarily. I was discussing this subject some few years ago in a clinical lecture, in which I took some trouble about this particular point. You will find it in the GUY'S HOSPITAL GAZETTE for 1899, page 181, and so I will not say much about it now. I have referred to some of the statements I there made, and I find that as long ago as 1855 authors were saying that the theory of the cumulative action of digitalis was a mere bugbear, and need not hamper one's action. Yet only a few days ago one of my clerks was asking how far one was to be influenced by the fear of this cumulative action. No doubt it is correct that its action upon the kidneys is such that the more digitalis is taken the more difficult it is for the kidneys to get rid of it. That is also the case with strychnia. But the mere fact that the effect is likely to get greater and greater need not prevent you using the drug in doses which experience has shown to be safe

You may give patients with heart disease 10 minims three times a day for weeks without any harm happening. If you give stronger doses to a patient, you may find that after a period of improvement he has symptoms which are due to the over-action of the drug, and you must then reduce it. If you give 15 minims every four hours it is very likely the patient will be much better, but after forty-eight or sixty hours you may have to reduce the dose, otherwise the symptoms I refer to may occur. But that is not peculiar to digitalis; similar difficulties may occur with opium, with Epsom salts and black draught; even too much bread and butter is prejudicial to health.

But do not give digitalis merely because a murmur is audible. I remember seeing the statement that digitalis given to rabbits or guinea pigs, over long periods, increased the size of the heart. That seems to imply that digitalis is a valuable stimulant or nutritive agent for the heart, quite independently of heart disease, therefore you might think it of some value when given even apart from the symptoms of failing compensation. But I do not think that has been shown to have a clinical or therapeutical application, and practically physicians agree that digitalis is not wanted until the heart begins to fail.

There are other points of interest in connection with digitalis. There is aortic disease, in which one sometimes hears that digitalis should not be given. Undoubtedly aortic disease is not so often benefited by digitalis as is mitral disease. In aortic disease the heart is often beating at the rate of 70 to 80 per minute and that is not a condition in which digitalis is of great value. If the heart is not a weak heart, and if it is acting strongly, digitalis is not needed. It has been said that digitalis is dangerous in aortic disease, because it prolongs diastole, and more regurgitation takes place than would occur if the diastole were not lengthened. I think that fear is not widely entertained, and certainly digitalis may be given in aortic disease when that aortic disease approximates to mitral disease; that is to say, when, as a result of aortic disease, you have secondary mitral regurgitation, and the heart gets feeble and behaves like one with mitral disease, you may give digitalis in small doses without fear.

I have said that irregularity of the heart is a feature which you have to bear in mind when you are administering digitalis. But there are irregular hearts with which digitalis will not give you very satisfactory results. There is a condition of pulse known as the bigeminal pulse. (As "geminal" is derived from a word meaning twins, it is not clear that we also want the prefix "bi.") In these cases two beats of the heart occur close together, and then there is a long interval; then two more beats close together; another long interval, and so on.

Digitalis will rarely do any good for this regular irregularity; in fact, in some cases, the drug appears to produce that very condition. It has been stated by Dr. Mackenzie, of Burnley, that in the bigeminal pulse the second beat is always a so-called premature beat, or premature systole; that is, when the pulse is collapsing after its beat, a second beat comes in the middle of it before it has sank to the level of the long pause. There is a long diastole, and then the beats begin again. Each of those pairs is a beat and a premature beat. But when I know that, I am not much nearer explaining why digitalis produces it or why it cannot cure it. But when you are dealing with the very irregular kind of pulse for which digitalis is suitable, it is remarkable how patients will respond to it sometimes. Perhaps a patient may only require to take some fifteen or twenty doses of it to get well, and remain well for weeks. In other cases the resistance to the medicine is greater.

I will not say much about the other cardiac tonics which are mentioned, and occasionally used. Strophanthus is a valuable remedy, and as near to digitalis as it can be. Convallaria is not of very great value. Caffein citrate is not so useful as digitalis. Squill is certainly far behind it. Strophanthus is said to have less action upon the arterial tension, less action as a vaso-constrictor, than digitalis, but I doubt if the recognition of this difference is of very much service in clinical work. No doubt the majority of practitioners use digitalis.

Strychnia is a valuable drug, but you will not get strychnia to do the same thing and in the same way, in reducing irregularity, as digitalis does. I think strychnia is especially valuable as a cardiac tonic in the weakness which comes over the heart as a result of infective toxines, such as that of typhoid fever, of pneumonia, or of scarlet fever, particularly when injected subcutaneously. In mitral irregularity I am not clear that you can demonstrate any improvement in the results of digitalis by adding strychnia and nux vomica to that drug.

I want now to say a few words about the treatment of certain symptoms in the last stages. What I have spoken of so far have been the middle stages. In the course of heart disease,

perhaps after repeated failures of compensation successfully treated for the time, a period comes when these remedies are of less and less service. When the cardiac muscle gets more and more strained and structurally altered, then digitalis, with its magical capacity, becomes less valuable. Other remedies are badly absorbed by the circulation, and other tissues are involved in such a way as to prevent the development of their full action. Then the patient has symptoms of two or three kinds, which are very distressing. There is local pain over the chest, and often omiting and insomnia. One would like to be able to say that in heart disease one knew exactly how the symptoms occur, and how to treat them successfully. But that is not always so. With regard to pain over the heart, the local remedies may be applied, such as belladonna plaster, which is not very efficient. Undoubtedly the application of leeches does considerable good, especially if the right heart is much dilated. How far the leeches draw the blood from the interior of the right auricle may be doubted; but removal of blood from the surface of the sternum does, in many, give great relief from that sensation of tension and pain which these patients have, and which seem to result from the paralytic distension of the cavities of the heart. Iodide of potassium is of value sometimes. And there are two remedies which are constantly used; and I think generally in succession one is tried, and if that does not succeed, the other is used. One is nitrite of amyl, the other is morphia. Nitrite of amyl is often tried first, and if you have the kind of pain which is called anginal, there is all the more reason for trying it. This is much more likely to be the case when the lesion is aortic than when it is mitral. Failing this, with great pain, it is justifiable to give a small dose of morphia, watching carefully the result.

Vomiting is another troublesome symptom in advanced heart disease. A case recently in Addison ward was very interesting in this respect. The patient, a boy, had a very large heart, with double mitral murmur, and, post-mortem, he was found to have aortic disease, acute endocarditis, mitral stenosis and regurgitation, and secondary lesions. He came in on July 24th, and died on August 12th, and he was affected with vomiting during the whole of this period. Nothing which was done appeared to check it. It is true that, post-mortem, his stomach was found to be very much congested. But that is so in nearly all these bad cases at the time they die, and it is probably not the entire explanation of the vomiting in this case. The treatment of the vomiting in these patients is very difficult. You have to be careful not to give too much food. Digitalis sometimes causes vomiting, even in what is not otherwise a severe case, especially, perhaps, when combined with diuretics and purgatives.

If there is vomiting, I think it is always good to give digitalis alone in water, and not try to get assistance from other medicines. In this case there may have been some disturbance of the vomiting centre, through the circulation. You may try, in these cases, the remedies which are commonly used in vomiting. Bismuth and hydrocyanic acid are mentioned. Oxalate of cerium is used for the vomiting of pregnancy, but is not very efficient here. Tincture of iodine (two or three minims in a teaspoonful of water every hour) is valuable in many conditions.

The last subject I want to speak of is sleeplessness, which is also a serious matter in some of these severe cases. There again one wants to get at the cause, if possible. If you were to cure the heart disease you would bring sleep; but that is not the practical side of the question, because you cannot remove the heart disease. If your depletive treatment does not bring sleep, you may need to have recourse to other measures. Digitalis ought to help sleep; it is sometimes given for the ordinary sleeplessness of worry and mental strain, with the idea that it is a vaso-constrictor, and that the condition of the brain during sleep is one of anæmia. After hard work—shall we say playing bridge too long, or studying medicine too much at night—the vessels dilate; if you can get them to contract again, you will be likely to bring about sleep, and digitalis is sometimes useful in such cases. If you cannot do good in this way you must try ordinary hypnotics and carminatives. Bromide of potassium is not very efficient, but you can try it in combination with hyoscyamus. Chloral hydrate is a cardiac depressant, and is best avoided as far as possible. But there is chloral-amide, which is very valuable. Hyoscine may be injected subcutaneously, $\frac{1}{200}$ or $\frac{1}{100}$ of a grain of the hydrochloride. And there is the well-known sulphonal, a useful but somewhat difficult drug; and also the later discovered members of this group,—trional and veronal. And there is always morphia, which, as I have already said, you need not be afraid to use if the patient is not deeply cyanosed, and if you do it with care and judgment. Always commence with a small dose—$\frac{1}{10}$ or $\frac{1}{8}$ grain. Where the patients are so bad as we are now supposing, there need be no fear of making them morphinomaniacs.

Ballad of The Old Golfer.

Golfers, a word with you, I pray;
Whether you love a match, or score;
Whether your hair be brown or grey,
Holing in five—or several more,
Whether your tee shots hop or soar,
This is the burden of my lay,
Here is the wisdom you must store,
The holes grow longer every day.

Slash while you can! Another day
You will not drive as heretofore.
Gobble the tin! Perchance it may
Not always seem a broad barn door,
You may be glad to drive in four
Where two once carried all the way.
Oh, listen to an old man's lore,
The holes grow longer every day.

The waves will thunder in the bay,
Yet change no pebble on the shore:
The turf be crisp, the pansies gay,
All as they were in days of yore,
Yet frost shall touch thy head with hoar.
No "CRACK!" shall charm thy ball away;
Thou canst not frighten Time with "FORE!"
The holes grow longer every day.

Peace, let the old their threats outpour,
We have no memory—while we play,
We'll hole in three again—before
The holes grow longer every day,

Pupils' Physical Society.

THE eighth meeting of the Session was held in the Smoking Room, at the College, on Saturday, January 27th, 1906, at 8 p.m. Mr. G. C. F. Robinson was the President in the Chair. Mr. Nicholson read an interesting paper upon "Some Tumours of the Testicle." He gave it as his view that many tumours, formerly called sarcomata of the testicle, are really carcinomata, and that the carcinomata are really more common than the sarcomata. He also discussed the mixed tumours at length, and wished to apply the term "embryomata" to many of them. The paper was illustrated both by microscope slides and by a macroscopic specimen. Messrs. Robinson, Cameron, Kenelm Digby, and the two Secretaries joined in the discussion. Thirty-seven members were present, and the meeting adjourned to coffee at 9.50 p.m.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Dental News.

Notes of a Dental Clinical Lecture by Mr. DOWSETT.
Friday, January 26th, 1906.

I am going to restrict myself in my remarks entirely to the treatment of fractured mandible, as the short time of half an hour at my disposal for this lecture does not permit me to speak of other matters in connection with fractured jaws. Such cases are very frequently seen here amongst our hospital patients, and if you will only keep your eyes open in the Conservation room, you can learn a great store of knowledge about fractured mandible. The models and splints before you on the table are nearly all from cases that our house-surgeons have treated during the last twelve months.

Now, to start with the simplest form of treatment:

Bandages—The two kinds that are commonly used here are the ordinary four-tailed bandage and the Hamilton sling, and the latter is much the more effective. The bandages can be used either alone or in conjunction with some form of chin boot, such as you see before you—pasteboard, leather, gutta-percha, plaster of paris on flannel, &c., either one being cut and moulded to the chin. Now, what I want to impress upon you is this, that although this bandage treatment is extremely useful and necessary as a temporary measure, it should very seldom be adopted as a permanent means of fixing the fracture. The only conditions under which this is justifiable, when other means are available, are when the fracture is single, simple, with no displacement, and only very slightly movable, and this is the rarest kind of fracture imaginable.

Splints—Now we come to interdental splints and appliances, and it is upon these and wiring the bone, which I will mention later, that one can always depend for absolute fixation of the fragments. For any of these splints models of the jaws are essential, except for an occasional case, where a wire splint can be bent up to the mouth. The impression can be taken with either Stent's composition, gutta-percha, or wax; the Stent's, on the whole, being the most suitable, keeping the fragments as firm as possible during the impression taking. If there be any displacement this will be shown on the model. If so, the model must be sawn through in the fractured region or regions, and the fragments set in their normal positions by adjusting them to the bite with the upper model and rebedding them with plaster.

Wire Splints—The first of these is the Hammond—a splint that was, I believe, first used in the Franco-German war. The principle of this is that it holds the fragments together by a rigid appliance fixed to the *teeth;* therefore, it is only applicable when most of the teeth are standing and they happen to be firm. Also when the fracture is single, and in or in front of the bicuspid region, otherwise there would not be sufficient hold upon the few teeth in the smaller fragment. And

lastly, it can only be used when there is little displacement, which can be easily rectified.

Mr. Newland-Pedley has devised a method of making this splint to the mouth, doing away with the necessity for models, with the great advantage that it can be put on at once. The wire is moulded around the teeth in the mouth and twisted off in the front, bending the twist downward to avoid irritation of the lower lip, or the ends may be passed in opposite directions, through a short piece of metal tube and bent downward to hold them firm. The improvised splint is then bound with fine wire in the usual way.

(To be concluded in the next issue.)

Specialities.

Carlsbad Water Salts.

We have received samples of the above. The Carlsbad water is, of course, well known. It has, however, often occurred to us how the multitude of continental waters in the market can possibly hold their own, since many of them cover the same field and reach the same spot. To have expressed a candid opinion at the time of their introduction would doubtless have shocked the modesty of the proprietors, but, in this case, considering the lengthened period the Carlsbad water has been before the Profession, and its many curative properties, it is simply a matter of the survival of the fittest. The main constituents of the Carlsbad water are carbonic acid, alkaline salts, and sulphate of soda, the latter predominating. It has a slight saline taste, clear in colour, and palatable to take, and when safely used can be recommended for many physical disorders, particularly chronic constipation, renal calculi, diabetes, gout, etc. It is also prepared in the form of salts (powder and crystals).

Sanatogen.

We have received from Messrs. Bauer & Cie., of Berlin, samples of a new albuminous preparation, Sanatogen, recently placed on the market. It contains in an extremely concentrated form stable combinations of albuminous bodies, from which satisfactory results have been obtained in practice. Sanatogen, moreover, is distinctly palatable, and is therefore without the disadvantage under which many other of these concentrated foods labour, that the patient quickly tires of them, and comes to regard them with positive distaste, and even loathing.

Sanatogen is a dry, greyish-white powder, which swells up readily in water, forming a milky fluid. It consists chemically of casein 95 per cent., and glycero-phosphate of sodium, 5 per cent. It thus contains an easily digestible albuminous substance, together with a salt of the nerve tonic group, and should be efficient in exercising both a nutritive and a stimulating effect.

Dental Society Dinner.

THE Eleventh Annual Dinner of the Dental Society took place on February 3rd. The dinner was largely attended, one hundred and sixty members being present. Mr. Hopson was in the chair, and amongst those present were Mr. Cosmo Bonsor, Sir Cooper Perry and the Dean of the Medical School. After the usual loyal toasts had been drunk, the chairman proposed the toast of "Guy's Hospital and Schools." He spoke of the Medical School as the *parent* of the Dental School, and found matter for congratulation in the satisfactory character of the relationship. The toast was replied to by Mr. Cosmo Bonsor. "The Dental Society" was proposed by the Dean of the Medical School. In the course of his speech he spoke of the necessity for shortly renovating the Dental School buildings, and expressed the hope that some of those present might come forward with offers of help in the work. If each guest presented a new dental chair, the Dean calculated that the Dental School would be the richer by one hundred and sixty chairs, each of which should bear a brass plate with the donor's name upon it.

The toast was replied to by Mr. P. S. Campkin, who referred to the high percentage of Army and Navy appointments held by Guy's men, and to recent successes in examinations. The health of the visitors was proposed by Mr. Blake Odgers, and replied to by Mr. Sidney Spokes. Lastly, Mr. Hicks proposed the health of the chairman, to which Mr. Hopson responded. A pianoforte solo by Mr. T. Godfrey, songs by Messrs. Endean, T. Godfrey and Roy Ellis, and a violin duet by Messrs. Power and Elliot were interspersed between the speeches, and added a great deal to the enjoyment of a most successful dinner.

Appointments.

Civil.

BALL, J. BRAMLEY, L.D.S.R.C.S. Eng., has been appointed Dental Surgeon to the Royal Hospital School, Greenwich, S.E.

HOLMES, T. E., M.D. Camb., has been appointed Pathologist to the Bristol Royal Hospital for Sick Children and Women.

LANGDALE, HARRY M., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Second House-Surgeon and Assistant Anæsthetist to the Sussex County Hospital, Brighton.

Naval.

Fleet-Surgeon EVERARD H. SAUNDERS, R.N., is placed on the retired list at his own request, with the rank of Deputy Inspector General, January 13th.

Surgeon HUGH B. GERMAN, R.N., has been appointed to the *Argyll*.

Surgeon RICHARD WILLAN, R.N., has been appointed to the *Donegal*.

On some Tumours of the Testicle.

A paper read before the Pupils' Physical Society on Saturday, January 27th, by G. W. de P. NICHOLSON, M.A., B.C.

MR. PRESIDENT AND GENTLEMEN,—The object of this paper is to attempt a classification on a histological basis of the cases of tumour of the testicle that have been treated in this hospital, and of which specimens and microscopic slides have been preserved in the Museum and the Surgical Registrar's room.

Altogether I have collected 59 cases; which, with the exception of one hereafter to be mentioned, are all to be found in the records of the hospital. Among these there is not a single instance of an innocent tumour of the testicle, if we except certain cases of so-called cystic disease of the testis. I propose, therefore, not to treat of these innocent cases, and will content myself with merely enumerating them in their proper place.

I have not collected any cases from the literature, since my object has been merely to treat of those cases that are accessible to all of us here this evening. I shall, however, quote instances of some forms of which no specimen occurs in my series so as to render the subject more complete.

In treating the subject of malignant disease of the testicle, we meet with several difficulties. Clinically it is impossible to differentiate a sarcoma from an encephaloid cancer of the testis. On cutting into the tumour again, both forms are seen to be almost identical in appearance. Even on microscopical examination it is often very hard to distinguish the one from the other. Many people call a slide a sarcoma of the testis that others would call a carcinoma. Again, if a section be taken from one part of the growth it often looks like a sarcoma, whereas if another part be examined, it proves to be an undoubted, though probably obscure, carcinoma.

Kocher and many other authorities who have taken up the subject are of opinion that most, if not all, the doubtful specimens, notably such as are known as alveolar sarcomata, are in reality carcinomata. In writing a paper of this kind it is necessary to give a definite opinion, even if it clashes with that of an authority, but I must say that I quite agree in considering these doubtful specimens to be really carcinomata. I have sought for and obtained other opinions, and they agree with my own on the subject.

There are several slides, both in the Museum and in the Registrar's collection, that, adopting the views of Kocher, are wrongly labelled. It will be my object this evening to attempt to back my opinion by a few facts.

I wish to bring forward two main points. The one is, as you will have already gathered, that the frequency of sarcoma has been much exaggerated at the expense of carcinoma. The other is that "cystic disease of the testis" is a misnomer, and that some other name, such as "embryoma," or "mixed tumour," ought to be substituted for it. I will deal with these points in order. I have followed Mr. Jacobson's classification in his "Diseases of the Male Organs of Generation."

Malignant tumours of the testis may be divided into:

1. Carcinoma.
2. Sarcoma.
3. "Embryoma" or "mixed tumour," commonly known as "cystic disease."

Before dealing with the first two of these groups it will be necessary to define as exactly as possible what is here meant by a carcinoma as opposed to sarcoma. It is a new growth which, when examined microscopically, (1) consists of large faintly staining cells with clear nuclei. The cell-bodies are mostly irregular in shape, being rendered thus by mutual pressure. (2) There are trabeculæ made up of a fibrous stroma; these may be large, so as to enclose big spaces packed with a mass of cancer-cells, or small, so as to surround only a small cluster of perhaps half-a-dozen cells. In no case, however, can the connective tissue be traced for any distance between the cells, nor does it surround individual cells. (3) The blood-vessels have a definite wall, and are not represented merely by channels lying between the cells of the growth, which is so characteristic of sarcomata. They also run mainly in the fibrous trabeculæ. Indeed, in many sections, the vessel walls will be seen to be thick, especially in the older parts of the growth. (4) Especially round the periphery of the growth there are patches of small round cells, whose nuclei stain much more deeply than those of the cancer cells. They are an inflammatory condition, and quite typical of carcinoma, since in a sarcoma these nuclei stain the same depth as the malignant cells. (5) In some specimens the malignant cells can be seen blocking the lymphatic spaces. (6) The tumour disseminates mainly through the lymphatics, whereas a sarcoma does so mainly by the blood-vessels.

It is of only secondary importance in these cases to examine the cut section of the tumour with the naked eye, as its appearance is very much modified by the amount of fibrous tissue present, and by the extent of the necrotic changes which may have taken place.

Carcinoma. — There are two forms of carcinoma:— (*a*) the scirrhus, (*b*) the medullary.

(*a*) *The Scirrhus* is exceedingly rare. There is not a single example in my series, since although many slides show a fair amount of fibrous tissue, yet in all the cancer cells predominate. I therefore quote Mr. Jacobson: "They appear later in life than the encephaloid form. The commencement is very obscure and the course slow, the mean duration of eight cases having been six years. The size attained is usually not great; a hen's egg being the maximum estimate. The hardness of the growth is extreme. It creaks on section and contains little, if any, juice. Microscopically, the connective tissue shows abundant, very thick, connective-tissue tracts and trabeculæ, in which are alveoli containing epithelial cells."

(*b*) *The Medullary Cancer.*—In my series there are 24 specimens of carcinoma testis, many of which have been

labelled as sarcomata, both in the Museum catalogue and in the collection of slides in the Surgical Registrar's room. In coming to an opinion of their nature I have borne in mind my definition of carcinoma given above; namely, the characters of the cells; evidence of alveolation, the trabeculæ, however, not extending between the individual cells; the comparative thickness of the vessel-walls; the presence of patches of deeply staining small round cells.

I have here a slide (Reg. 1028) which shows the difficulties encountered. Looking at the section it looks very like a sarcoma. There is a great mass of cells, between every one of which, apparently, a well-marked connective tissue trabecula can be traced. On examining, however, a part of the slide in which the essential cells of the growth have necrosed and almost wholly disappeared, the connective tissue is found to be arranged in well-marked alveoli, leaving spaces that were originally filled with cancer-cells; into none of these spaces are there fine connective tissue strands running, such as one would expect from the rest of the section; and, indeed, on re-examining the first part looked at, these trabeculæ are found to be spurious, the appearance of them being produced by incipient degeneration of the cancer-cells, leaving a clear part around the nucleus, and a more deeply staining, faintly granular part at the periphery, which closely resembles connective tissue. The blood-vessels, too, in many parts have a well-defined wall, and the nuclei of endothelial cells can be seen surrounding their lumen in several places.

In order to convince you fully on this subject it would be necessary to show either slides or photographs and drawings of every single specimen in question. This it is impossible to do to-night, the example which I have selected being a very good one, and to my mind the one of the whole series which offers the greatest difficulty in diagnosis. I should like, however, to say a few words on the general appearance of these growths under the microscope. There are two main types:—

1. In which there are comparatively few connective tissue trabeculæ, which enclose large spaces tightly packed with cancer cells. The blood-vessels seen in the trabeculæ and the cells of the growth are thus poorly supplied with blood, and very prone to undergo necrosis and various forms of degeneration. This necrosis begins in the centre of the alveoli and extends almost to the periphery. The necrosed areas are liable to disappear, being either liquefied while still in the body, or falling off the slide during the course of preparation, thus producing an appearance of a cubical or columnar-celled carcinoma, of which the second slide (Reg. 2316) I propose to show is a very good example. Apart from this, and one or two similar sections, I have not come across a genuine columnar-celled carcinoma, nor does Mr. Jacobson mention it. When discussing the origin of carcinoma of the testis, we shall see that we do not expect to get a columnar-celled growth.

2. There is another type. In this form the fibrous stroma is much finer and less evident. It sends off very delicate processes, which surround a few cells o the growth, but cannot be traced between them. The accompanying section (Reg. 2437) is a good example of this type, which is generally known as the "alveolar sarcoma testis." All the examples in the Museum are thus labelled in the catalogue.[1]

I have tried to show, then, that the alveolar sarcoma is really a carcinoma. There are, however, many other specimens of carcinoma wrongly named, both in the Registrar's collection and in the Museum catalogue. The total number thus labelled is twelve (Mus. 2133, 2116, 2117, 2121, 2124–29; Reg. 2115, 2437). One of these (Slide 2113 [Mus.]), is unfortunately broken, but there is one corner fairly well preserved, in which distinct alveolation can be made out.* I shall have occasion to quote this case at greater length when discussing the clinical aspect of the cases.

This is an under-estimate, if anything, since there were two or three sections about which I am not at all certain.

I will discuss the naked-eye appearance of the growths after having dealt with sarcomata, since it is so similar in both cases that it is impossible to make any definite statements which might help in diagnosis.

As regards the *starting-point* of carcinoma, Birch-Hirschfeld proved in 1868 that it originated in the glandular epithelium by pointing out the resemblance of the cells of the growth to the epithelium of the seminal tubules and showing intermediate forms between the alveolus of carcinoma and the normal testicular tubules that still existed in some of his sections. This view, with some modifications, has since been held, the most important being that of Monod and Terrillon, who believe that the growth does not originate in functional seminal cells, but in epithelial cells of an embryonic type included in the testis during its development. The part of the testis affected first seems to be the centre of the organ. Most of the tumours have been removed at too late a date of their lives to show this point well. Mr. Jacobson quotes several cases of early carcinoma in which the growth was found to occupy the centre of the gland. I have only found one mention of this point among my cases: here it is stated that a thin layer of testicular substance could be seen spread out over the growth. No. 2109 in the Museum shows an encapsuled growth, measuring an inch in diameter, at the upper end of the testis. Several of my microscopic slides, however, show traces of testicular substance at the periphery.

The epididymis is usually sooner or later invaded and then buried by the growth.

As regards the tunica vaginalis, my opinion is that it is not invaded by the disease until at a comparatively late date, since several fairly large tumours show its two layers to be quite separate from each other. I have not,

1 Catalogue of Pathological Specimens. 3rd Edition, vol. 2, Nos. 2124—29.

* Since writing this I have examined another section, which I intend to show. It is a carcinoma,—one of the "alveolar sarcoma" type.

however, been able to satisfy myself on this point, since no mention is made of it in the surgical reports, and in a good many of the Museum specimens the parietal layer has been stitched on to the testis, so that it is impossible to see the sac.

We now come to the subject of *dissemination*. The iliac and lumbar glands are early involved. I can do no better than quote an abstract of the post-mortem report of a case of carcinoma of an undescended testicle. (Mus. 2113.)

The right testis was undescended. It weighed thirty-six ounces (Quain gives the normal weight as ¾ to 1 ounce), but was completely non adherent and freely moveable, and attached by a pedicle formed by the spermatic cord. The internal ring was closed. The peritoneum was healthy. There was a huge mass of cancerous retro-peritoneal glands, in which both kidneys, suprarenals, the pancreas and duodenum were embedded. It had eroded three or four lumbar vertebræ. The bile-duct was compressed. All these viscera, however, with the exception of the duodenum, could be readily peeled from the mass. One of the bronchi of the left lung was completely occluded by a large cancerous bronchial gland. The cervical glands and the thymus were cancerous. There were some small deposits on both pleura, and a few nodules below the mucous membrane of the œsophagus. The condition of the liver and right kidney is interesting. There were no deposits in them, but they were both cystic. The cysts, in the case of the liver, were shown to be due to dilatation of the smaller bile-ducts. They are, of course, produced by the pressure of the large mass of retro-peritoneal glands, but that this pressure did not produce total occlusion is shown by the absence of jaundice.

In another report I find mention made of a deposit in the liver (Mus. 2106), but the early implication of the retro-peritoneal glands is the most striking fact. This shows that dissemination is mainly, if not entirely, by the lymphatics. The inguinal glands are not enlarged unless the skin is invaded.

As regards secondary or metastatic cancer of the testicle, I have found no case, with the exception of a specimen in the Museum (Mus. 2104) in which an epithelioma of the scrotum had invaded and infiltrated the testis, enlarging it to three inches in its largest diameter.

Sarcoma.—I now come to the subject of sarcoma of the testis.

Kocher's view is, as I have already stated, that sarcoma is not so common as is carcinoma. I agree with him. Out of my cases twenty-one are sarcomata, including two endotheliomata, whereas twenty-four are carcinomata. This is probably an over estimate, since it is quite possible that several of these may turn out to be carcinomata, and I have also included several specimens which may with equal justice be included among my third group—the embryomata.

In the records no less than thirty-eight specimens are labelled as sarcomata; ten of these I have included among the carcinomata, and eight among the embryomata.

The usual varieties of sarcoma are met with here. These are the round, spindle and mixed-celled.

Ten of my cases are small round-celled sarcomata, resembling those of any other organ. All those in the Registrar's collection are of this variety.

Among the Museum specimens there are several spindle and mixed-celled sarcomata (Mus. 2118, 2123). Two show well-marked giant cells. These are small, and resemble mycloid and not tubercular giant cells.

Several show extensive mucoid degeneration, the cells being of various shapes. (Mus. 2122, 2131.) One shows very long spindle-cells. Another shows no degeneration around the remains of the seminal tubules, whereas the rest of the section is extensively degenerated. This looks as if the growth had originally started in the connective-tissue around the tubules. Another shows extensive areas of chondrification. (Mus. 2133.) There are patches of round cells, which, at their edges, merge into cartilaginous areas. There are no other structures, such as epithelium, which is of great importance, since most chondro-sarcomata are, as I hope to show, really embryomata.

Finally, there is a beautiful specimen of the very rare "rhabdo-sarcoma" (Mus. 2138), which shows isolated fibres of striated muscular tissue in all parts of the section.

I have provisionally included these growths among the sarcomata, although it may be urged that a sarcoma containing fibrous and muscular tissue is really a mixed tumour or embryoma. Sarcomata are, however, connective tissue tumours, and as long as they contain merely connective tissue elements, they may be safely left where I have placed them. The rhabdo-sarcoma certainly contains cysts, but I do not know what they are lined by.

There are two endotheliomata among my series of cases which I have already mentioned. The *starting-point* of sarcoma is the connective tissue between the walls or within the walls of the testicular tubules. Kocher thinks that it begins in the hinder part of the testis, either in the rete, or in the epididymis. One of the specimens in the Museum (Mus. 2112) shows both epididymes to be filled with sarcoma in a boy of sixteen, the testes being quite free.

A few words now on the macroscopic appearance of both carcinomata and sarcomata of the testis. The tumour is oval and roughly preserves the shape of the gland. It may grow to a very large size. The biggest in the hospital records (Mus. 2114) measured six and a half inches in length by thirteen in circumference at its broadest part. At first its outline is smooth; later on, however, the growth bursts through the stretched and thinned tunica albuginea, giving rise to more or less elevated bosses. The two layers of the tunica vaginalis sooner or later become adherent in places, at first through inflammatory changes, later through invasion

by the new growth, which may finally burst through the skin and present a fungating ulcer.

On section, the surface is soft and pulpy, or firmer and more fibrous in the more fibrous sarcomata, and varies in colour from white to dark red. There are often numerous patches of discoloration to be seen, due to hæmorrhages; or sago grain-like bodies, due to myxomatous changes or to pieces of cartilage. Numerous cysts are visible. These may be due to hæmorrhage, caseation, mucoid and colloid degeneration, or to dilatation of seminal tubules or tubes of the epididymis; a very good example of the latter is in the Museum. Another specimen is reduced to one large cyst into which project some shaggy masses of growth.

The cord is usually thickened from dilatation of the blood-vessels which have to supply the constantly-growing tumour. Deposits of new growth in the cord are unusual, having only occurred in four cases. In a fifth there was an extensive recurrence in the stump of the cord after castration.

The tumour feels hard and heavy, except where it has undergone softening.

Mr. Jacobson gives the following points in the naked-eye diagnosis of these tumours: The more distinct the bands of fibrous tissue, the more there is evidence of cartilage (sago-grains); the more abundant the cysts, and the less involved the coverings, the more likely is the tumour to be a sarcoma.

As regards the *dissemination* of sarcoma of the testis, I have got post-mortem records of two cases (Mus., 2112, 2114). In neither of them is there any mention made of the lumbar glands being enlarged; indeed, in one it is expressly stated that they were not. One case had a mass of growth the size of a walnut projecting from the interauricular septum into the right auricle. There are deposits in the kidneys, the intestine with enlarged mesenteric glands, and huge masses in one man invading the muscles of the back and adherent to the skin and dura mater of the cord (producing paraplegia), and in the other (the man whose lumbar glands were not enlarged) occupying great part of the pelvis and fixed to the pubic ramus and the capsule of one hip. In neither case, however, were there deposits in the lungs or liver. This suggests that sarcoma even in the testis disseminates more in the way it should, *e.g.*, by the blood-vessels, than has been hitherto believed, and that some at least of the cases recorded in which the glands were extensively enlarged were really carcinoma. If you remember, I pointed out, under the dissemination of carcinoma, that the glands are extensively enlarged. Two of these specimens I should like to show you (Reg. 1381, 1958). They look very like a carcinoma, there being what appears to be a layer of columnar cells lining a lumen. The stroma contains many sarcoma cells, and is in parts distinctly myxomatous. I think that the apparent alveoli are really condensed masses of sarcoma cells, since the stroma can be followed up to and between them; and that the lumina are areas of mucoid degeneration in which the cells have disappeared, since I can in places trace fine trabeculæ across them. These sections are really endotheliomata.

A third man (Reg. 1484), whose medical adviser wrote to the authorities to announce his death, and whose letter is copied into the report, died within six weeks after being discharged from the hospital with a large mediastinal tumour, which caused complete paraplegia below the fifth intercostal space, having invaded the cord. No post-mortem, however, was performed.

Of course two cases are not sufficient to generalise on, but it is a suggestive fact that all the cases of carcinoma examined had large glands, whereas those of sarcoma had none.

Clinical aspect.—Now for some remarks on the clinical aspect of both forms of disease.

A striking feature is the history of injury given by many cases. The trouble may set in either directly after the injury, or not until after a long interval of quiescence.

Let us consider both cases separately—

1. *Direct.*—One man (Reg. 2316) gives a history of the swelling dating from a blow. Another (Mus. 2125) stated that he frequently squeezed his testis when riding, and always the same one, owing to the way his clothes were made. A third (Reg. 470) states that he felt a lump in his testis two to three weeks after an injury. It was probably there for some time before he noticed it.

2. *After an interval of quiescence.*—There are several explanations set forth as to why this should happen:—

1. Conuheim's theory that some dormant embryonic remain becomes lit up to activity by the injury.

2. That the patient is subject to some new-growth diathesis.

3. Pearce-Gould's[2] theory is that traumatic sarcomata are connected with the repair of injury; the growth of the tumour being due to some arrest in development of the separative material, such as leucocytes, which at a certain stage resemble, more or less closely, sarcoma tissue.

Whatever theory may be correct, the fact remains that several cases give a clear history of an injury to the testis at some time previously. One man (Reg. 1958) injured his testicle nine years before his trouble began. His testicle atrophied and remained only half the size of the other. After nine years of quiescence it suddenly grew, and on removal proved to be infiltrated with sarcoma. Another man (Reg. 1484) noticed a swelling of his testicle, which suddenly increased after an injury to the size it was on removal. Two men (Reg. 115; Mus. 2114) had congenital tumours which grew actively after an injury. In only five reports is it definitely stated that there was no injury.

Malignant disease of the testis begins at an earlier age than it does in most other parts of the body.

Mr. Jacobson says that carcinoma is commonest between thirty and forty-five, and does not occur in infancy. Out of 18 cases, the mean age is forty-four, the earliest being nineteen, and the latest sixty-four. He

2. Lancet, vol. ii., 1885, p. 1037.

says that sarcoma occurs before ten and again between twenty-five and forty. The mean age of 16 of my cases is thirty-four, the earliest being two and the latest seventy-two. Bland Sutton mentions that sarcomata occurring in paired organs in early life often attack both organs. The only case of that kind I have found is No. 2112 in the Museum, in which the growth occupies both epididyme of a boy of 16; the testicles being free.

The course of the disease is rapid. Indeed, malignant disease of the testicle kills more quickly than that of most other organs. I have not had time to follow up the cases in the Registrar's room, but one case died in six weeks from a large mediastinal tumour which had produced paraplegia, and was not suspected when he left the hospital. On the other hand, a man the other day applied to the Registrar for a certificate for a life insurance, one of whose testicles was removed four or five years ago for a sarcoma. The prognosis, therefore, is grave. Mr. Jacobson states that the glands are usually involved six months after castration.

Retained testis.—Before leaving this subject I should like to say something about malignant disease of a retained testis. It is generally supposed that this is common. I have only collected two cases; one certain (Mus. 2113), and the abstract of the post-mortem of which I have read to you, and the other probable, since the whole pelvis was found to be occupied by a cystic mass of new growth, which, microscopically, is either a carcinoma or a sarcoma—probably the former, and may very well do for a growth of the testicle.[3] Until the mass has been dissected, however, it is impossible to make a definite statement about this case.

I hope I have succeeded in adducing some arguments, based on the microscopic appearance and on the ways of dissemination of these tumours, to show that a good many that have hitherto been labelled as sarcomata are really carcinomata.

Innocent tumours.—Before attempting to deal with the difficult subject of embryoma of the testis, I shall here mention what I have to say on innocent tumours of this organ. I largely quote Mr. Jacobson's book. The following tumours have been described:—

1. *Lymph adenoma.*—Regarded by some as a form of small round-celled sarcoma.
2. *Fibroma.*—Very rare.
3. *Myxoma.*—Mr. Jacobson mentions three cases. It is, however, doubtful if a pure myxoma ever exists; and one of these cases is probably a myxo-sarcoma, since the patient died with secondary deposits in his lungs.
4. *Myoma.*—Two varieties are described, namely, containing unstriped and striped muscle-fibres. I have mentioned one case (Mus. 2138) of the latter among the sarcomata, as its basis is clearly sarcomatous.
5. *Enchondroma.*—Mr. Jacobson subdivides these growths into two groups:—

(*a*) *The pure or uncombined,* in which cartilage is the only new tissue present. They are rare. He thinks, quite rightly, that the term enchondroma should be reserved for these cases only.

3 (This case is not included among my 59.) Hale White, 1905, No. 443.

(*b*) *The mixed,* in which, besides cartilage, there are found sarcoma or carcinoma cells, or cysts lined by various forms of epithelium. The former two should more rightly be called chondro-sarcoma (of which there is one instance in the Museum, 2133), or chondro-carcinoma. The latter should be included among the mixed tumours.

6. *Osteoma.*—Two cases have been recorded. You will see, therefore, that innocent tumours of the testis are very rare; the only undoubted one being fibroma; possibly also osteoma, some myomata, and the pure enchondroma. This question is rendered all the more difficult by the undoubted fact that these innocent tumours may suddenly, as the result of injury, or from no ascertainable cause, take on active growth and present all the features of sarcoma.

Embryoma.—I now come to deal with the exceedingly complicated subject of *mixed tumour or embryoma* of the testis.

I propose here to include under this head the following conditions:—

Cystic disease.
Fœtal inclusions.
Dermoids.

There is no case of either a fœtal inclusion or of a dermoid in my series. I therefore merely mention them here, stating that by a fœtal inclusion I mean a cyst, which often appears to be outside the testicle itself, containing all the structures found in a dermoid, but of a more complicated kind, such as bones resembling vertebræ, pieces of intestine, etc.

In dealing with this subject I am met with a difficulty at the very outset. Of the thirteen cases collected I can only find notes, however short, on ten cases, in two of which my notes contain nothing more than the age of the patient. I will now summarise my notes and then discuss a few of the cases in a little more detail.

Age.—The average of seven cases is twenty-nine. The youngest being twenty-two and the oldest forty-four. There are also two cases in which the tumour was apparently congenital.

Injury.—A definite history is only given in one case, in which a congenital tumour began to grow rapidly after an injury.

Length of time swelling was noticed:—Two tumours were congenital. Another had been noticed for seventeen years (since patient was five years old). Two more had lasted from six to nine months, and two more under three months.

Metastasis:—In only one case (Mus. 2119) is there any mention thereof. Here, in a man of thirty, there were found, post-mortem, a large mass in the mediastinum, many deposits in both lungs, and one of the right cerebral hemisphere. Clinically, then, these growths resemble sarcoma and carcinoma in their behaviour.

I will make a definition and give a description of what I include in this class. Embryomata or mixed tumours are new growths consisting of a basis of mesoblastic tissue, either embryonic (sarcoma, myxoma cells) or more

fully formed (fibrous, muscular, cartilaginous). Epithelial structures derived from both the epi- and the hypoblast can be seen in different parts of the section,—such as stratified, columnar and ciliated epithelium,—and also arranged in such a manner as to resemble definite glands. Well-developed rudiments of teeth can be made out. A striking feature of this form is the presence of cysts. These are either lined by columnar and ciliated epithelium, or have arisen in the midst of a solid process of stratified epithelium by a process of degeneration resembling that occurring in ordinary epitheliomata of the skin,[4] the cavity of the cysts being filled with shreddy and wavy threadlike masses, which show some tendency to arrange themselves concentrically around a centre, as is so well seen in the cell-nests of epitheliomata. Another important feature is the presence of numerous "epithelial pearls" lying dotted about in the stroma, which again call to mind the cell-nests.

The stroma is composed of mesoblast. In some sections it is made up of more or less firm fibrous tissue, and may even show some unstriped muscle-fibres, whereas in others it is loose, myxomatous or sarcomatous; areas of cartilage are a very conspicuous feature. This difference in the stroma explains the great difference in malignancy that these tumours exhibit.

Very similar tumours are found in the ovaries, and I have here several slides taken from the ovary of a girl of fifteen, and from numerous secondary deposits that were found in the peritoneum, some of the abdominal viscera, and the pelvis.

There is another form of embryoma I should like to mention. I have got three cases. The main feature of these cases is the presence of decidual cells. They all three show deeply staining, irregular, and multi-nucleated syncytial cells, and the large, round, and clear cells of Langhans. The first of this series is in the Museum (Mus. 2119). It shows a mass of organising blood-clot, in one part of which these decidual cells are well shown.[5] The second is a slide of which I hope soon to get the history. It is the only one of my series that is not included in the hospital records. It shows a loose fibrous, in places almost sarcomatous, basis, in which several lobules of carcinoma-like growth are to be seen, and in one place, which contains much blood-clot, is shown very nicely this syncytium. The third is a case from Lewisham Infirmary, a history of which was published some time ago in the GAZETTE, and the specimen of which is now in the Museum, although not as yet set up. It shows a large cyst or two lined by ciliated epithelium, a fibrous stroma, large masses of carcinoma, and, in a place occupied mainly by organizing blood-clot, a large mass of syncytium. I may add that the Museum case died with deposits in his mediastinum, lungs, and cerebrum. I think it does not require the eye of faith to call these slides instances of a deciduoma malignum of the testis.

Having now described these tumours as well as I can, I must try and adduce some reasons why I think that the term "Cystic Disease of the Testis" should be abandoned and the term "Embryoma" or "Mixed Tumour" substituted.

The cases of embryoma in the Museum are labelled thus:—Round-celled Sarcoma (2119); Cystic Chondro-Carcinoma (2132); Cystic Chondro-Sarcoma (2134, 2135 and 2136); Myo-Sarcoma (2137); Cystic Myo-Sarcoma (2139); Myo-Chondro-Sarcoma (2140), and Cystic Disease (2141). On comparing the slides there is no real difference between any of these tumours. Some, indeed, are more cystic than others; some contain more epithelium, muscle-tissue or cartilage than others, but they all show a connective-tissue stroma with numerous epithelial structures, such as small cysts, glands, epithelial pearls, and teeth, the finest tooth being in the cystic chondro-carcinoma. It is, to say the least of it, very inconvenient to have such a varied nomenclature for growths so closely resembling each other. The specimens known as "cystic disease" differ in no more important respect from the others than that in them the cysts happen to be larger.

I will here show a couple of good instances of "Cystic Disease."[6]

I think it necessary, for the sake of completing this subject, briefly to mention a few theories that are, or have been, held as to the origin of these tumours. I will not attempt to discuss them.

(*a*) Curling thought that they arise from a dilatation of the testicular tubules. This is obviously insufficient, since I have shown that epithelium can be found that originated both from the epi- and hypo-blast.

(*b*) Kocher considered them to be an adenoma of the seminal tubules.

(*c*) Eve thought they arise in rudiments of the Wolffian body. This theory resembles that of Shattock and Bland-Sutton[7] in regard to cystic disease of the kidney.

(*d*) St. Hilaire propounded the theory of fœtal inclusion, according to which a more or less imperfect germ of a second fœtus has been included in the first.

(*e*) The testis develops near the caudal extremity of the fœtus, where the three blastodermic layers are not clearly defined from each other. It is thus easy for a piece of it to be included. This accounts well for dermoids.

(*f*) Lebert's theory.—These embryomata are the result of some departure from the natural formative process of the testicle. The peculiar function of testis and ovary predispose either gland, under abnormal circumstances, to the evolution of structures which, in the natural course of things, should result from a combination of these secretions.

(*g*) Partial hermaphroditism. This presupposes the presence of an ovum in the testis, which becomes impregnated by the spermatozoa secreted by the gland, and cannot be applied to congenital tumours.

4 Shaw-Bell's Specimen.

5 Clinical Research Association, 816, December, 1905.

6 Bell's slide, Reg. 327, 920.

7 Bland-Sutton, Lancet, 1887, vol. i., p. 256. Shattock, Path. Soc. Trans., 1886, p. 287.

Before leaving this subject I should like to mention a case (Reg. 1976, 2002) admitted into Lydia ward, under Mr. Symonds, in 1904. You will doubtless be surprised at my including it when I tell you the patient was a woman. But this case may throw some additional light on teratomata of the testis, and I should be sorry to omit it:—

Catherine C., æt. 49, married, was admitted for a strangulated left inguinal hernia. She had never menstruated, and had no children. When young, she ran after the ladies and not the men. At the operation, a body the shape and size of the ovary, but with a smooth exterior, was found in the hernial sac. It was cut. A laparotomy had subsequently to be performed, when two small nodules were found in the mesentery belonging to the piece of strangulated intestine. They, too, were cut. The section of the body in the sac proved to be made up of a fibrous stroma in which are embedded large lobules of healthy-looking testis, in some of which spermatozoa can be seen; lobules containing amyloid bodies, which Mr. Targett pronounces to be prostate, and lobules of tissue closely resembling the suprarenal. No uterus could be felt when the laparotomy was being done. The vagina ended blindly two inches up, and there was no cervix. The lumps from the mesentery proved to be merely inflammatory. The patient recovered and went out.

There is no doubt that she was really a man; and here I have the only instance I could find of a perfectly innocent-looking tumour containing fully-formod epithelial structures, and which I feel perfectly at liberty to include among my class of embryomata.

I have thus been able to collect three kinds of embryoma; (1) the fœtal, in which the decidua is shown; (2) the juvenile, in which there is a mixture of more or less simple epithelium, teeth, cartilage, muscle, etc.; and (3) the adult, in which we see fully-formed and apparently actively secreting testis, besides prostate and suprarenal.

In conclusion, I hope that this paper, although it is very imperfect, and there are no doubt many errors in it, and many important points left out, will have shown you that much work requires still to be done on the pathology of tumours of the testis.

REFERENCE TO SPECIMENS.

1.—Carcinoma.

No. of specimen. Report where case can be found.

Registrar's slides—
- 115. 1898, Golding-Bird, 299.
- 1028. 1901, Golding-Bird, 296.
- 1270. 1902, Steward, 25.
- 1618. 1903, Dunn, 116.
- 2316. 1905, Golding-Bird.
- 2437. 1905, Symonds.

Museum Catalogue. 3rd Edition—
- 2104.
- 2105.
- 2106. P.-M. Insp., 1862, No. 6.
- 2107.
- 2108.
- 2109.
- 2110. Reg. Rep., 1893, Jacobson, 23.
- 2111.
- 2113. Undescended. P.-M. Insp., 1882, No. 399.
- 2116.
- 2117.
- 2121.
- 2124.
- 2125. Reg. Rep., Vol. 173, No. 169.
- 2126.
- 2127. Reg. Rep., Vol. 124, No. 11.
- 2128. Green. Inspections, Vol. 5, p. 150.

2.—Sarcoma.

Registrar—
- 931. 1901, Jacobson, 56.
- 470. 1899, Howse, 361.
- 804. 1900, Howse, 389.
- 868. Private case of Mr. Jacobson's (1900).
- 1063. 1901, Lucas, 340.
- 1109. 1901, Golding-Bird, 516.
- 1244. 1902, Lane, 40.
- 1381. 1902, Dunn, 190.
- 1484. 1903, Dunn, 28.
- 1958. 1904, Jacobson, 322.

Museum—
- 2112. Epididymes. P.-M. Insp., 1862, No. 1.
- 2114. P.-M. Insp., 1888, No. 197. Reg. Reports, Vol. 132, No. 13a.
- 2115. Reg. Reports, Vol. 163, No. 107.
- 2118.
- 2120.
- 2122.
- 2123.
- 2130.
- 2131.
- 2133.
- 2138.

3.—Embryoma.

Registrar—
- 327. Private case of Sir A. Fripp (1898).
- 920. 1901, Jacobson, 23.
- 1976. (F) 1904, Symonds, 576.

Museum—
- 2119. Green. Inspections, Vol. 14, p. 15.
- 2132.
- 2134.
- 2135. Registrar's Reports, Vol. 150, No. 69.
- 2136.
- 2137.
- 2139.
- 2140.
- 2141.

Case from Lewisham Infirmary.—Guy's Hospital Gazette, Vol. 19, No. 453 (October 21st, 1905).

Clinical Research Ass., 816, December, 1905.

Testimonials.

SOME misconception appears to exist in the minds of students in regard to the necessity for and the use of testimonials; hence a little information concerning them may not be unacceptable. A testimonial is willingly written by a teacher as a generous appreciation of the character, industry, and ability of a past student; it is essential for an applicant for a public appointment, and is generally required by one applying for a private engagement.

It may first be said that only those teachers who are in a position to speak of a candidate from personal knowledge should be asked for a testimonial, and that in asking each candidate would do well to give in writing full details, with dates, of his work at the hospital, the appointments held, and the prizes and diploma or diplomas gained. He should also state the purpose for which the testimonial is required, and not seek to obtain it either through a third person, or by means of a conversation through the telephone.

A testimonial of a general character is not desirable, since it is of little or no practical value; indeed, what may be inferred from being left out, as in some medical bulletins, is often of more importance than that which is actually written.

For example, the following, written many years ago by a well-known surgeon, a President of the Royal College of Surgeons, left much to be desired, and could scarcely have been intended for publication:—"Mr. —— was a student at —— Hospital for the past four years, during which time he enjoyed unparalleled opportunities."

Although a testimonial can only apply to the period during which the student came under the instruction of the teacher, it may prove very useful as a record of work well done and approved.

The hall-mark of fitness to practise a profession is shown by the diploma or diplomas held, but it may be supplemented, when required, by a testimonial from personal knowledge of the candidate.

An instance of the gross misuse of a testimonial may be cited, as it caused its writer to jeopardise his diploma of M.R.C.P. Lond.

A. B., a physician holding hospital and medical school appointments, was successfully treated by a Dental Surgeon. The Dentist wrote at a later period to the Doctor, saying that a patient desired some assurance that he (the Dentist) was a capable and conscientious man.

The Doctor readily acceded to the request, and sent in good faith a letter of recommendation, but it was published and circulated broadcast without his knowledge or consent. The publication, in the form of a pamphlet, was brought to the notice of the Royal College of Physicians, and of the General Council of Medical Education, and both of these bodies demanded explanations from the Physician. The Dentist fortunately acknowledged that he had misused the letter, and the Physician was thereby exonerated from blame, and retained his good name.

This exceptional abuse of a private letter may never occur again, but it shows the advisability of not going outside the recognised limitations of a testimonial, and should be borne in mind as a remote possibility.

Finally, it may be mentioned that it is an act of courtesy to send to the writer of a testimonial a copy of the same, should it be printed or type-written, and used by a candidate for an appointment, and further, to acquaint him with the result of such candidature.

WILLIAM A. MAGGS.

Pass List.

Final Conjoint Examination, Jan., 1906.

MEDICINE, SURGERY AND MIDWIFERY.—*C. C. A. de Villiers.

MEDICINE AND SURGERY.—G. N. Bartlett, *A. H. Clough, *T. B. Layton, *W. P. Purdom, T. Turner.

MEDICINE AND MIDWIFERY.—J. O. Musson.

MEDICINE ONLY.—R. S. Harper, T. Norman, E. L. R. Norton, H. F. Vandermin, G. Wacher, *A. Walker.

SURGERY ONLY.—*C. W. Gibson, *T. W. Kirby, F. B. Lowe, *L. Myer, *N. H. Oliver, *W. S. Orton, *S. Reader, Richard P. Rowlands, *H. D. Wyatt.

MIDWIFERY ONLY.—J. T. De Coteau, C. M. Ockwell, H. A. Pallant, P. K. Taraporwala, H. E. H. Tracy, H. F. Wight.

*Denotes completion of examination.

Conjoint Examining Board in England.

DIPLOMA OF PUBLIC HEALTH.

G. E. Malcomson, M.D., J. F. Northcott, M.D.

Indian Medical Service.

G. E. Malcomson, M.D., P. S. Mills, M.B., B.S.

From the Gazette's Special Pathologist.

W. L. W. M., HUDDERSFIELD.—The wall of this cyst consists of compressed ovarian tissues lined by a thick stratum of hyaline fibroid material. It has no epithelial covering. The exact origin of the cyst is not obvious, but it may represent a degenerated corpus luteum.

W. P. G.—The urine is acid in reaction and contains a considerable amount of albumen. The centrifugalised deposit consists of mucin and abundant red blood discs, and also contains granular and hyaline tube casts, granular renal cells, a few minute calcium oxalate crystals, and a small number of leucocytes.

V. J. H., WESTCLIFF-ON-SEA. — This specimen of sputum contained some muco-pus, and a fair number of pneumococci. No tubercle bacilli could be found.

PATHOLOGIST.

Sport.

Rugby Football.

GUY'S v. R.I.E.C.

This match was played at Honor Oak Park on Saturday, January 27th, and resulted in a victory for Guy's by 34 points to nil.

For the first time this year we turned out a full cup team. Llewellyn and Lee played in the centre, and Gibson returned to his position at back. We lost the toss and Saunders kicked off against a fairly strong wind. The first fifteen minutes of the game were of a scrambling nature, our forwards getting rather the better of it. In a rush down the field, Jones dribbled the ball into our opponents' twenty-five and centred it "soccer fashion," and Llewellyn, going at full speed, picked it up and scored between the posts. Lee converted. After some more forward play, Jones sent the ball out to F. Alcock at the half-way line, and he ran down the touch line, all attempts to push him into touch being futile. Running round behind the goal line, he scored behind the posts. Lee failed with the kick. Soon afterwards Alcock made another typical run along the touch line, but being tackled near the goal line, passed to Jones, who was unable to ground the ball before breaking the corner flag. There was no further scoring in the first half and on changing ends we led by 8 points to nil.

We soon settled down in the second half with the wind at our backs, and our opponents were completely outplayed at all points. Our three-quarters were in great form, and scored whenever the ball came out to them. Lee scored one try, Stringer three, and Llewellyn two, Lee converting four of them, so that the score when no side was called was 34 points to nil. All but one of the tries, in the second half, were the result of three-quarter play. The one try was the result of a splendid rush by our forwards. The ball as kicked over the goal line, and in a race to touch it down, Pinching was beaten by Llewellyn. Jones, Lee and Llewellyn made several good openings, while Stringer showed some of his last year's form, taking his passes well and running strongly. His kicking was very erratic at times. Monaghan was slow in getting the ball away, but played well in defence. The forwards were very good in the loose, but in the tight scrums our "hookers" were quite out of form.

GUY'S v. BART.'S.

INTER-HOSPITAL RUGBY CUP-TIE.

This match took place at Richmond on January 29th, before a moderate attendance. During the greater part of the game rain fell heavily. Bart.'s kicked off, the kick was returned by Stringer, the ball did not quite reach touch, but A. Alcock dashing up managed to put the ball into touch in the Bart.'s twenty-five. Several scrums took place, but Guy's could not manage to get the ball out. At last Monaghan got the ball well away to Jones, who transferred to Alcock at the right moment, and the latter scored only a few minutes after the commencement of the game. Lee made a good kick from far out, but failed to convert. After the kick-out Guy's forwards, who were playing very well, kept the ball up near the Bart.'s line; and Pinching rushed over with a good try. No goal resulted. Rain was now falling heavily, and as a consequence the standard of play fell off, and very little more passing was seen. Lee and Jones saved time after time with good kicks, and the forwards were good in the loose, but could not gain possession of the ball from the scrums. Guy's got a free kick for off side, and Bart.'s marking, from their kick sent the ball over the half-way line for the first time. Then the Bart.'s half intercepted a pass and almost scored, but the Guy's forwards, headed by Saunders, rushed the ball up the field again. The ball was kicked over the line, and Bart.'s forced. Half-time was called with Guy's two tries (6 points); Bart.'s, nil.

After the kick-off Bart.'s were given a free kick, as the Guy's halves were off side. Jones saved well with a good screw kick into touch. Both sides had many free kicks during this half for off side, and marks. Gibson received a nasty knock, and after recovering took the ball well and made a long kick into touch. Bart.'s got the ball well away time after time, but good tackling by Lee and Llewellyn spoilt their passing. There was no further score, and Guy's won an uninteresting game by two tries (6 points to nil).

REMARKS.—Gibson at full-back was very safe, and played one of his best games. The three-quarters had no chance of showing their attacking powers; the tackling of all was good, but they did not take the ball cleanly. Jones was the best back on the ground, and saved Guy's time after time; Monaghan is still slow at getting the ball away. The forwards were very good except in one most important thing, they could not get the ball out at all. They have two faults, one is that their front rank men are far too slow in hooking the ball back, the Bart.'s men had the ball out before our forwards' feet were up; the other is that they pack too high. The opposing front rank men were underneath our front rank men. We must have the ball out against London, and to do this Guy's forwards must pack lower and tighter, and get the first shove.

GUY'S 2ND XV. v. HONG KONG AND SHANGHAI BANK.

This match was played at New Beckenham on Saturday, January 27th, and after an interesting and closely-contested game ended in a victory for Guy's by 1 goal and 2 tries (11 points) to 2 goals (10 points). During the first ten minutes play was confined very much to the Guy's twenty-five, and in this time the Bank team scored a try which was converted. The Guy's forwards then shook themselves together and played a fine game from this onwards. During the rest of the first half play was confined mostly to mid-field until the last ten minutes, when Guy's pressed hard, but there was no further score at the interval.

Soon after kicking off, Digby obtained possession close to the half-way line, and after a fine run scored outside the posts, Munden failing to convert. Play was soon carried back to the Bank twenty-five, and Palmer got over close to the corner flag, but after considerable deliberation the linesman decided it was touch back. On the ball being thrown in, Lloyd took it smartly and ran through, but was just pulled up on the line. Soon after this Digby again scored for Munden to convert. Palmer soon added a further try, Munden's kick failing. The Bank right wing soon after this scored after a good run, the major points being added. The Guy's forwards following up the kick charged down the Bank back before he could get his kick in, and play was confined to the Bank twenty-five for the last ten minutes, but no further score resulted; during this time Digby injured his back while tackling, and had to be carried off the field. Team :—

GUY'S.—W. T. Clarke (back); W. E. S. Digby, G. C. Covell, E. L. Lloyd, B. H. Palmer (three-quarters); F. Cutler, L. S. Baker (halves); P. Smith, M. E. Ball, W. H. Robinson, D. Reynolds, D. Stout, M. M. Munden, E. P. Minett, L. L. C. Reynolds (forwards).

GUY'S "A" XV. v. OLD WHITGIFTIANS.

This match was played on the Whitgift Grammar School ground, on Saturday, February 3rd.

A strong wind was blowing all through the game, but Guy's playing against it in the first half, did quite as much attacking as their opponents. Nearing the interval the Old Whitgiftians were penalised in their twenty-five, and Munden made a fine attempt at goal, the ball just falling short. Soon after, Lloyd picked up the ball in the loose and dashed over. The try was not converted.

With the wind in the second half Guy's attacked continuouly, but could not press their attack home. Towards the close the Old Whitgiftians rallied, and were close to the Guy's line when the whistle blew for time, leaving Guy's winners of a hard and well-contested game by 1 try to nil. Team :—

GUY'S.—P. E. H. Patey (back); B. H. Palmer, C. E. Lloyd, G. C. Covell, W. T. Clarke (three-quarters); F. Cutler, C. D. Roberts (halves); L. L. C. Reynolds, C. E. Sprague, D. Stout, D. Reynolds, M. M. Munden, E. P. Minett, M. M. Adams, P. Smith (forwards).

Association Football.

GUY'S v. OLD REPTONIANS.

Played on January 20th. The ground was in vile condition, it being extremely difficult for the players to keep their feet.

The Reptonians pressed at the beginning of the first half, but gradually the play was brought back to mid-field. We never seemed to get together, till our opponents scored late in the first half. Shortly after this a combined attack by our forwards ended in Witts equalising.

After change of ends the exchanges were pretty equal, neither side being able to do much. However, the Reptonians broke away and scored again, thus winning by 2 goals to 1. Team :—

GUY'S.—C. A. Wood (goal); H. Bastard, E. G. Robertson (backs); C. W. Greene, P. V. Pedrick, V. Townrow (half-backs); A. W. Berry, C. Witts, A. Zorab, E. Barnett, F. Barker (forwards).

GUY'S v. LANCING OLD BOYS.

Played at Honor Oak Park on January 27th. We were without the services of Denning and Pedrick, but proved strong enough for the occasion. The ground was in a very sticky state, which rendered play rather difficult. There was never any doubt as to which side was the better. After the game had lasted ten minutes, we scored, and followed this up with another goal from the kick-off. Lancing now attacked, and, from a scramble before our goal, got through. We scored again just before half-time, crossing over with a lead of 3–1. In the second half we added on another two goals, and just before the end Lancing got through again. Result :—Guy's, 5; Lancing, 2. Team :—

GUY'S.—Wood (goal); Bastard and Robertson (backs); Greene, A. G. Jones and Townrow (half-backs); Berry, Witts, Zorab, Barnett and Barker (forwards).

GUY'S v. ROYAL ENGINEERS.

Played at Chatham, on Saturday, February 3rd. Though the ground was in excellent condition, there was such a hurricane of wind that play degenerated into a scramble on the touch-line. Guy's faced the wind in the first half, and, by sheer hard work, got within shooting distance more than once, but could not score. In the second half, we put through within a minute from the restart, Witts doing the needful. This was followed shortly after by another goal from Barker. The Engineers then broke away and scored, and nothing further was done by either side. Team :—

GUY'S.—C. H. Wood (goal); H. Bastard and E. G. Robertson (backs); P. Pedrick, A. F. Denning and —. Wormald (half-backs); H. Berry, C. Witts, A. Zorab, E. Barnett and F. Barker (forwards).

Papers by Guy's Men.

The X-ray Treatment of Ringworm. By Gerald Sichel, F.R.C.S. Eng. — *British Medical Journal*, 3rd February, 1906.

Birth.

GAITSKELL.—On January 23rd, at Burgess Hill, Sussex, the wife of H. Ashley Gaitskell, M.D., of a son.

ED.—H. C. C.

GUY'S HOSPITAL GAZETTE.

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Passim.

THE question of how the Clubs' Union is to be freed from debt has again become imminent, and we publish to-day a circular letter which has been issued on the subject. The debt was incurred quite unavoidably, and was due to the gradual decrease in the number of students entering at the hospital, with the result that the original subscription of £2 2s. became inadequate. In 1905 the Clubs' Union Council unanimously raised the subscription to £3 3s., with the result that the income in now again equal to the expenditure. There remains, however, the debt which was incurred before the raising of the subscription, and which was due to a very natural reluctance to take that step. It is pointed out that members subscribing during 1902–1905 have obtained benefits for eight or ten guineas for which members are at present charged fifteen guineas. It is quite clear that the subscriptions of future members cannot be used to defray debts incurred by their predecessors, and in this difficulty the Council has decided to ask for help from those members who joined the Union during the time when the subscription was inadequate to meet the expenditure. We can only express the hope that everyone, realizing that the Clubs' Union has no alternative but to make this appeal, will respond as generously as possible.

AT the recent dinner of a City Company Mr. Arthur Balfour proposed the health of our Treasurer in a speech which occupied something like a whole page of *The Times*. It was the general opinion that Mr. Balfour might have spoken more to the point.

WE regret to have to record the death of one who, during her lifetime, had the welfare of Guy's and of its Medical School very close at heart. Mrs. Arthur Durham not only during her husband's lifetime identified herself with him in all his devotion to the hospital, but after his death continued to show undiminished interest in all that concerned the Medical School. Of all the school prizes there have been none which, year after year, have aroused keener competition, or promoted better or sounder work, than the Arthur Durham prizes for dissection. These prizes, first instituted by

Mr. Arthur Durham during his lifetime, were most generously maintained after his death by Mrs. Durham, and their good effect in raising the standard of the work done in the dissecting room is likely long to survive. We offer to Mrs. Durham's family and relations our very sincere and grateful sympathy.

The recommendations of the Hospitals Committee of the British Medical Association in the matter of the better control of out-patient departments, which have been referred to the several districts for consideration, are published in a supplement to the current number of the *British Medical Journal*. They cannot fail to be of interest to all who have anything to do with the working of out-patients. Twelve in number, each states in general terms a general principle. That these general principles are in the main sound, nobody who has the welfare of hospitals at heart will be likely to deny, but one has only to turn from the general to the particular—only in imagination to endeavour to apply them to some one individual case—to appreciate how insurmountable are the difficulties to be encountered in that application. Recommendation No. 6, for instance, demands that "Except in emergencies, sufficient evidence shall be obtained upon two points :—

a. That the patient is not in a position to pay for *adequate* treatment.

b. That the case is, from a hospital point of view, suitable for treatment."

Here we have a definition of those who are eligible, but who shall define the word *adequate ?* We presume the doctor must make the attempt. There is to be established a sort of dual authority, that of the doctor and that of the *almoner*. To the physical examination of the patient there is to be added a financial examination equally searching, and the sufferer who is in the end triumphant, must make good his claim in both courts.

We do not envy either doctor or almoner his task. The doctor is to be expected, from one examination of the patient, to give an estimate in pounds, shillings, or pence, of the cost of his treatment until such time as the patient recovers. Everybody knows that an opinion is seldom given off-hand that a case must be watched, the effect of this or that treatment tried, before it is possible to make an accurate diagnosis, much less an accurate prognosis. Time must elapse before a child, brought for a cough, can definitely be pronounced as non-tuberculous; before an old man, complaining of dyspepsia, can be freed from the suspicion of malignant growth. But if these recommendations are to have any practical value, the doctor must make his prognosis, like his diagnosis, off-hand, and, moreover, must express it in terms of coin of the realm. The almoner's task seems equally difficult. When it is a question only of degrees of poverty, as is the case in the vast majority, it is a hard matter to decide how much we may legitimately expect a labouring man to deduct from his own expenditure, and from that of the rest of the family, in order that the sick child may have every chance. These points will need so much debate that we can well imagine the recovery of the patient often preceding the verdict of the court.

The majority of the recommendations are aimed at the difficulty of excluding unsuitable applicants for relief. We fear, however, that in their present form they will not be effective in producing a scheme, applicable in all cases, which will abolish the evil. There are other recommendations on less important points. It is advised in one that all patients should be seen by a registered medical man, and in another that there should be an age limit for all hospital medical officers, so that the applicant for relief is safeguarded as much from the lapses of senile old age as from the errors of too enthusiastic youth. On the whole we are inclined to think that the only practical solution of the difficulty lies in the adoption of the second and alternative proposition—that hospital out-patient departments should be confined to casualties and consultations. We doubt, however, if the public would sanction such a limitation of its charity, or the infliction of so much hardship on the poor.

The Rugby Cup-tie against St. Mary's resulted in a win for Guy's by 24 points to nil. The game was a good one. Forward, there was not a great deal to choose between the sides, but the Guy's backs were infinitely the better, and were responsible for most of the scoring. The final tie, Guy's v. London, will take place at Richmond on March 9th.

A propos of what we said last week in congratulating Dr. Stamm on the result of his recent law suit, we have received a letter in which Dr. Stamm points out that, while the case could not help being a great worry and vexation to him, thanks to the Medical Defence Union, who at once took the matter up, employed the best legal advice and counsel, and left nothing undone to ensure success, his actual expenses in the case were *nil*. Dr. Stamm urges the advisability of becoming a member of the Union upon all medical men, and especially upon those who have recently started practice. Such actions, persisted in against the individual, are likely to be dropped quickly when it is found that the fight must be against a powerful and wealthy society.

There are some grievances which it is more pleasant to nurse in silence, there are others which should be shouted on the house-tops. If Lysol must be the staple antiseptic in the Hospital, why, in the name of Lister, must it be used of such a strength,—or is it of such a quality?—that it renders one man out of four permanently unfit to do his work? A dresser with the familiar rash well-developed is useless alike to his surgeon and to his patients, and a burden both to himself and to the rest of his firm. It is not a little grievance, it is a serious one. The tortures of a skin which rebels at being dabbled for some hours' daily in this all-corroding, fiery fluid, have already wrecked more than one career, and forced men, full of active surgical promise, to decline upon medicine in despair. Lord Lister was wont to say that as his faith and confidence in antiseptics grew stronger his solutions grew weaker. Why then this *desperate* Lysol?

The Ladies' evening of the Debating Society was held in the College Smoking Room on Saturday, February 17th. The motion, proposed by Mr. Wacher and opposed by Mr. Mann, was, "That this House deplores the luxury of the present age, and advocates a return to the Simple Life." There was a fair attendance and a good debate.

On Friday, February 23rd, too late for any account of it to appear in the Gazette, takes place the annual Boxing and Fencing Display. Dr. Pavy is to take the chair, and—we quote from the bills and circulars—"a well-known member of the senior staff will appear." We have very little doubt that by this Mr. Higgens is meant. Mr. Higgens has for some thirty years had the reputation of being the best boxer on the active staff, nor is it likely, when he shortly joins the consulting staff, that he will find any there seriously to dispute his supremacy.

The Hockey team won their first Cup-tie match against Charing Cross in no uncertain fashion by 12 goals to love. If they continue as they have begun, they should have little difficulty in securing the Cup. The replayed tie between St. Thomas' and Bart.'s has resulted in a win for the former. Guy's will meet St. Thomas' in the semi-final at Richmond on Wednesday, February 28th, at 2·45.

We are asked to remind intending competitors that March 1st is the last day for sending in papers for the Physical Society Treasurer's Gold Medal. Last year, for the first time for some years, no papers were sent in, a fault which it is hoped may be remedied on this occasion.

We regret that the difficulty of securing a West-end theatre has proved insurmountable, and that in consequence the proposed performance of "The Prisoner of Zenda," in aid of the Million Shilling Fund, has had to be postponed until later in the year. An amateur dramatic entertainment in aid of the fund, however, will take place on April 11th, particulars of which will appear in the next Gazette.

Acute Mastoiditis.

CLINICAL LECTURE BY C. H. FAGGE, F.R.C.S.
December 4th, 1905.

GENTLEMEN,—I will introduce my subject by reading notes of three cases of acute mastoid disease in adults. The first is a man, æt. 24, who had been deaf in the left ear since he had measles at Eton, though there was no history of otorrhœa, either after the measles or since. On December 15th, after going to a dance, the patient was up all night because of the pain in his left ear. The next day the temperature was 101°, and the pulse 100, and the left ear, in which he had been deaf for so long, began to discharge, but without relieving the pain. He found that the left side of his neck, below the tip of the mastoid process, became painful, and the temperature ranged between 99° and 101°, until the sixth day, when it rose to 103°. On the 21st and 22nd December, that is, a week after the onset of the illness, his temperature was 102°. Meanwhile there was a profuse discharge from the ear, which was noted by his medical attendant to be peculiarly foul. I saw him a week after the illness began, and after mopping away much discharge from the ear, found a large perforation in his membrane, which looked, from its size, and the thick appearance of its edges, as if it were an old-standing, and not a recent, perforation. I imagined that when he was at school he had left middle ear suppuration, which had quieted down, and had now become acute again, probably owing to an infection from the pharynx. I palpated his mastoid process; there was no tenderness whatever there, but I found tenderness below the tip of the mastoid process in the neck, the neck was stiff, and rotation of the head distinctly limited. The temperature now was 101°, and the pulse 90, the tongue was furred, and the patient decidedly wasted. His skin was of a yellowish pallor, and he had the extreme lassitude of patients whom we term "septic." As his pyrexia, pain and general condition had remained unaltered for a week, even though the middle ear was apparently draining thoroughly, and as in fact the temperature was getting higher, I concluded, in spite of the absence of local signs of mastoid trouble, that he had suppuration in the mastoid process, and accordingly I opened it. Not only was the antrum full of pus, but all the mastoid air cells and diploe were affected, and the mischief in the bone extended backwards to the masto-occipital suture.

The only other point of interest about this case was, that instead of perforating in the most common position in adults—in the little supra-meatal fossa—the pus had worked its way into his neck on the inner side of the mastoid process, where there is a groove for the digastric muscle. Perforation in the digastric groove is not uncommon in adults, because it is situated on perhaps the weakest wall of the mastoid antrum, *i.e.*, its inner and lower aspect. This clinical fact was first drawn attention to by Bezold, Professor of Otology at Munich, and is called Bezold's mastoiditis. After leaving the bone the pus travels down the fascial planes of the neck, under the sterno-mastoid muscle, and so we see now why this patient had pain below the tip of his mastoid.

I continued my incision along the sterno-mastoid down into his neck, and evacuated a large abscess lying under the sterno-mastoid muscle. Beyond the fact that apparently the spinal accessory nerve was injured, either by my incision or the subsequent cicatrix, and temporary weakness and wasting of the upper portion of the trapezius resulted, he made an absolute recovery, the trapezius itself getting perfectly well in three or four months.

The next case was a man æt. 24, who felt seedy on December 18th last year, with a headache and a temperature of 101°. It rose to 103°, and on the 19th he had acute earache, followed by a watery discharge from the left ear. This continued, and a week later the temperature was 100°. The glands below the left ear were swollen, and there was some tenderness over the mastoid process. The temperature reached 100° every evening, and he wasted a good deal during the five weeks following the onset of his illness. There were pains in the calves and albuminuria. All this time there were practically no local signs of trouble in the mastoid, but now two local signs appeared which, as I shall point out, do not usually occur until five or six weeks after the mastoid antrum becomes infected. The first sign was that during the fifth week the soft parts over the left mastoid had become thickened, and the ear was pushed forward. The second sign was that on examining the ear with a speculum his doctor noticed that the postero-superior wall of the bony meatus was depressed. This swelling of the deepest part of the posterior meatal wall is produced by inflammatory products forcing their way from the antrum forwards and downwards through

the bone either along the vascular channels in this position or through a newly-formed fistula, and so forming a subperiosteal swelling in the deepest part of the meatus. In this case the postero-superior meatal wall was so depressed when I saw him that the meatus was almost closed. The discharge was profuse and foul, and on firm pressure over the antrum, where there was distinct swelling, there was deep tenderness. His antrum and all his mastoid cells were evacuated, and he got well. Almost immediately the pus was evacuated his temperature fell to normal, and the way in which he gained flesh during the following two or three weeks was remarkable.

The third case was that of an old man, æt. 82, who had otorrhœa for fifty years. He was a special reporter on one of the daily papers, and had been to all parts of the world with this charge of dynamite in his head. Twenty years previously, he had an acute exacerbation of his ear trouble, during which, it was said, bone came away from his ear. At the same time his facial nerve was paralysed and had remained weak ever since. Three weeks before I saw him, he took cold, and on the next day the facial paralysis was again complete. The discharge, which had always been present, was now profuse, and I think it was the foulest I have ever smelt. He had the characteristic pushing down of his postero-superior meatal wall, so that his meatus was completely blocked. He had also a large swelling in the parotid region. The antrum and the swelling in the neck were thoroughly opened up, and it was found that pus had forced its way—being apparently prevented from getting out through the meatus to some extent by the swelling—through the floor of the middle ear into the jugular fossa, and so down into the neck. In fact, an incision made in the neck opposite the bifurcation of the carotid went into an abcesss, and a pair of sinus forceps introduced through this went straight into the cavity of the middle ear without encountering any bony wall at all. Rather to my surprise, he got well.

This case reminds us that the floor of the middle ear, partly formed by the jugular fossa, is another weak spot in the tympanum, through which pus may force it way to the surface.

To compare, and perhaps to contrast, with these three cases, I will read notes of a fourth patient, a boy, æt. 14, who while at school had a cold and acute left-sided earache. For a week his left ear was painful every night, and he had a high temperature. Then the membrane ruptured, and for two weeks there was a free discharge from the ear. During the third week of his illness his temperature reached 102° every night, and fell to about 100° in the mornings. For three nights before I saw him he had acute headache, so that he could not sleep. There were no localising signs in his case at all, yet on exploring his antrum I found the whole mastoid process converted into an abscess, only bounded on its superficial aspect by the thin bony cortex, which had not yet given way.

He was peculiarly interesting in that after his mastoid abscess was evacuated he went on well for about three weeks, though his temperature occasionally rose, then suddenly paralysis of the external rectus of the eye on the same side, and slight optic neuritis, came on, alarming everybody amazingly. As the discharge from the ear continued, and the ocular changes suggested a local meningitis, after consultation with an oculist I operated again, and in the course of a complete mastoid operation, exposed the dura mater over the roof of the tympanum and antrum. Here I found nothing to satisfactorily account for the ocular paralysis, which, with the optic neuritis, cleared up as the otorrhœa diminished.

Of these four cases of acute mastoid trouble three were adults, and they were all decidedly different from those which you meet with in small children, where there is large swelling behind the ear. I draw attention to this because I think we are rather inclined to diagnose acute mastoiditis simply by a swelling behind the ear, and if such a swelling is not present we do not think of pus in the antrum.

Inflammation here is always the result of acute middle ear disease, itself secondary to infection of the pharynx the result of cold, influenza, measles, or scarlet fever. I was, only yesterday, reading in a paper by a medical officer of one of the fever hospitals his opinion as to the extreme frequency of acute mastoid disease in children in scarlet fever wards, and the absolute painlessness of the onset, so that it is often unsuspected until the ear is pushed forward by the acute mastoid subperiosteal abscess. It is curious that about one-third of the cases of acute mastoid abscess occur in children under five years of age. So, comparatively speaking, acute mastoid disease is rare in adults. Usually it is a streptococcic infection, unless it is due to a diplococcus, of which the most common is the pneumococcus. As a rule, pneumococcal infections of the middle ear are quicker in onset, and more inclined to extend and infect the neighbouring parts, as well as more inclined

to lead to intracranial mischief. In measles, as in influenza, the mastoid process is most commonly affected in the first few days. In measles this is the dangerous time, but in typhoid it will occur at about the fourth week.

I have related four cases which presented most of the common symptoms in adults. Some, however, have been omitted, so I will give you the symptoms in detail.

The onset of infection of the mastoid antrum, with or without the connected air cells, is usually a sudden one. A rigor, sudden pyrexia, and severe pain in the ear, which radiates towards the vertex, are common symptoms. The pain is of a most excruciating character, and nothing except morphia relieves it. So we find the patient's expression is anxious, the skin is pale, the pulse rapid. The patient may be so severely upset that vomiting occurs, and the general activity is quickly lowered. Subjective throbbing tinnitus often annoys the patient, and the noises usually synchronise with the pulse, and, I suppose, simply indicate that there is an acute congestion of the lining membrane of the middle ear and antrum. Sometimes, as early as the second day, pressure over the mastoid fossa, to which I have referred before, and which is above and behind the external auditory meatus, immediately below the posterior root of the zygoma, may cause pain, and soon a slight swelling can be detected in the same position. Further, it is noticed that the fever and the agonizing pain persist until the drum perforates, and even though the mastoid antrum has been affected, the perforation of the drum may be sufficient to clear up the whole trouble.

Here, perhaps, I ought to make it clear that in all cases of acute middle ear suppuration there is also pus in the antrum. Both are part of the same cavity, lined by the same mucous membrane. But the acute cases I am referring to are not those in which pus is being secreted by the lining membrane of the mastoid antrum, but where pus is actually *retained* in the antrum or mastoid cells. The mere presence of pus in the antrum does not give rise to the alarming symptoms, which are due to the retention of inflammatory products from blocking of the passage connecting it with the middle ear. So if, in the early stages, the membrane ruptures, the pain will subside, the temperature will fall, and even though periosteal swelling behind the ear and tenderness to pressure have existed, they may pass away and the patient get well. But if the escape of pus is delayed, and the first infection is very acute, the process continues.

An interesting case bearing on this was one which some of you may have seen, that of an old Guy's man, who was in Naaman ward early this year for acute otitis media. I saw him within twenty-four hours of the onset, and opened his membrane on the next day. Though the discharge became less and less, he had severe headache and occasional vomiting, and did not seem to improve at all. So I took him into Naaman, and while he was there his temperature subsided, and as he seemed better he went out. Then he became increasingly drowsy, and had increasing headache. So he re-entered Naaman two and a half weeks after the onset of his illness, and on opening his mastoid antrum I found very little pus, and I thought I had operated unnecessarily. But, by a mere chance, as I was curetting away some soft carious bone on the posterior wall of the antrum I found a carious track through which a pair of fine forceps passed directly on to the exposed dura mater, lining the posterior fossa of the skull near the lateral sinus. Then, gouging away the bone so as to expose the dura mater in this position perfectly over the whole area in which it was covered by granulations, I was compelled to remove bone until I had got away most of the mastoid and squamous portions of the temporal bone I think, the lower third of his parietal bone and a certain portion of his occipital bone. There was an extensive extra-dural abscess, and the area of bone removed was as large as the palm of my hand. All this trouble had begun and extended in a man who had acute middle ear disease for not more than forty-eight hours before his membrane was punctured. It was startling to me, and a very great lesson that such a thing could happen, for it was only after a careful search, guided by a forehead lamp, that I found a carious channel leading from the antrum into the extra-dural abscess. He got quite well, and within about two months of the operation was carrying on his practice again. I quoted this case to exemplify the fact I mentioned, that if the escape of pus is delayed, or the first infection is very acute, the process will continue in spite of perforation of the membrane.

Now we must return to the consideration of the usual symptoms. It is quite clear that if pus is retained in the antrum, either from blockage of the aditus between the antrum and the middle ear, or because of the mechanically bad drainage which this passage provides for the antrum,

and an acute infection from the organisms is going on, the diseased mucous membrane of the middle ear continues to secrete and discharge pus, and so the ear discharge persists.

I am very anxious to lay special stress on this point, that the otorrhœa usually persists even when pus is retained in the antrum and a mastoid abscess has been produced; so we must not adduce the persistence of otorrhœa as an argument against the presence of a mastoid abscess, nor is the cessation of the discharge any evidence of the presence of a mastoid abscess. You will remember that in all the four cases I have quoted the otorrhœa persisted, and I am most keen to hammer in this point, because sometimes students, and even others who should know better, argue on the lines which I have just tried to show are fallacious.

The temperature is usually normal in the morning and rises in the evening, as all my cases demonstrated. Pain continues, or if it temporarily subsides when the membrane ruptures, it now returns. And this pain has a tendency to wander about the deeper parts of the ear; or it may be carried up to the occiput, or to the vertex. Generally it is less marked for a time than it was before the drum perforated, but it gradually increases.

So we learn that the chief early signs in adults, because in them we get no local evidences over the mastoid, are the gradual depreciation of the general condition—the furred tongue, the septic aspect, the loss of appetite, the sleeplessness, and the general wasting. The local signs are less valuable in adults, because usually they are only late in evidence. I drew attention to the tenderness and swelling followed by fluctuation in the mastoid fossa, which are present if a subperiosteal abscess forms there. I think acute suppuration in the antrum ought to be usually discovered before a subperiosteal abscess forms in adults, because it must mean that about five weeks have elapsed since the onset of the trouble, and therefore that time has been lost.* Then there is a sinking down of the postero-superior meatal wall; this again should be rarely met with, for, according to the authorities, it does not come on before the nineteenth day, and usually much later still. The second case I mentioned was typical in this respect.

There is another symptom, of which I have no experience. It is said by Körner that if in a case of mastoid suppuration you compare the resonance on percussion over the antrum on the two sides, you get diminished resonance on the side of the abscess. But this is a late symptom, its average* time of appearance is the thirtieth day, and further, in order for it to be of value, there must be no thickening or swelling of the soft parts over the mastoid. If these parts are thickened, the diminished note may be due to such thickening. I have often tried to elicit this sign in an adult, but have never yet found it of value.

In an acute mastoiditis we should recognise three stages. The first is that in which the mucous membrane of the antrum is infected, sharing the same infection as the middle ear, from blocking of the Eustachian tube. The cavity of the antrum in the first stage is much diminished in size, because of the swelling of its lining membrane, and until the drum has perforated the inflammatory exudation is under a great deal of pressure, and the later the perforation of the drum is postponed the greater the probability of the bone underneath becoming infected. For you must remember that the mucous lining of the antrum is the periosteum of the bone; it is a muco-periosteal tissue. This stage is called acute empyæma of the antrum, such as you might have in the frontal sinus after a cold, and in it we are dealing only with disease of the lining membrane without bone infection.

Then probably as the process extends the organisms pass through the muco-periosteal lining and reach the underlying bone. The first direction in which the resulting carious process extends is through the mastoid air cells into all the soft delicate diploetic cells of the mastoid process. It may even extend beyond the limits of the mastoid itself into the occipital or the other bones of the skull. But the first stage may be curable in two ways; one, by perforation of the drum; the other, by the formation of a fistula towards the surface. By either of these means it is feasible that an automatic cure may take place. But by the time the pus has extended from the antrum into the adjacent cells, and has broken down the fine bony partitions separating these cells, you have a typical osteomyelitis, which nothing

* Körner (Die eitrigen erkrankungen des Schläfen beins), says that in his adult cases, on an average the following number of days elapsed from the commencement of the otitis media until these signs presented themselves:—

(*a*) Definite swelling in the mastoid fossa, 36 days.
(*b*) Fluctuation over the mastoid process, 46 days.
(*c*) Sinking of the deep meatal wall, 44 days.

*Körner (loc. cit).

will alleviate except removal of all the carious focus.

The third stage is that which we all often see in children, when the pus has escaped through a fistula and has formed a subperiosteal abscess.

In infants you remember that the mastoid process is feebly developed, and that the temporal bone consists of two parts, the petro-mastoid and the tympano-squamous. The middle ear and antrum are simply a cleft between these two portions of bone, which are not completely opposed. In the skull of a fœtus the post-auditory process of the squamous is seen to cover the outer wall of the antrum, which thus has its outer wall formed by the tympano-squamous, and derives its inner wall, roof and posterior wall from the petro-mastoid portion. In babies the original line of separation between these two parts is marked by a fibrous gap. The suture on the external surface of the mastoid process closes in the second year, but throughout childhood is a distinctly weak spot, and it is through this masto-squamous suture that pus which is pent up in the mastoid antrum forces its way outwards, and so produces a subperiosteal mastoid abscess, which, forming a swelling above and behind the ear, pushes the ear downwards and forwards, causing the typical swelling which we know so well.

Pus pent up in the bony mastoid process of an adult, or of a child over ten years of age, may force its way out in three or four directions. It may go backwards, and if it does, as in these specimens I show you, it soon reaches the posterior fossa, where it forms an extra-dural abscess. Nearly all intracranial complications of acute middle ear suppuration and secondary acute mastoid disease are in the posterior fossa. It must be your experience that it is not uncommon to see an abscess in the posterior fossa immediately behind the antrum, covering over the dura mater, which here bounds the lateral sinus. You see from this specimen exactly where such fistulous tracks lead to, and if an abscess forms in this position it would lie exactly in contact with the lateral sinus, and would be called a perisinuous abscess.

Again, perforation may take place in the supra-meatal or mastoid fossa, lying immediately above and behind the external auditory meatus. Perforation in adults may also take place through the inner wall of the mastoid antrum, and pus will then work its way downwards through the inner wall of the mastoid process, and so reach the neck; this is called a Bezold's perforation.

The fourth way in which occasionally a mastoid abscess comes to the surface is by the pus forming a fistulous track through the posterior wall of the meatus, and working its way out through the meatus, and such is the tendency of those cases in which there is a sinking down of the postero-superior meatal wall.

When a swelling behind the ear exists, the diagnosis has to be made from two conditions; one is a suppurating post-auricular gland due to pediculi or sores on the scalp, and the other is cellulitis or an abscess behind or around the ear, secondary to a boil in the external auditory meatus. A suppurating post-auricular gland behind the ear in children is most commonly due to pediculi, but it is sometimes extremely difficult to differentiate from an acute mastoid subperiosteal abscess. I have several times opened such an abscess in doubt as to whether it was simply a suppurating post-auricular gland from pediculi, or due to mastoid suppuration. I am sorry to say that only three months ago, I demonstrated to my dressers in the ear outpatients such a case as one of a suppurating post-auricular, which on exploration proved to be mastoid trouble.

If there is otorrhœa and swelling behind the ear, or if you have a swelling behind the ear and an inflamed membrane, the probability is that the two are connected, and that there is a subperiosteal mastoid abscess. If there is no history of otorrhœa, and on inspection of the membrane—which I fear is often neglected—nothing abnormal is seen, then the probability is that the swelling behind the ear is a suppurating gland, and the presence of sores or pediculi on the head would help to confirm such a view. You can be certain by making an incision, because if the pus lies in the subcutaneous tissues it is clearly not a subperiosteal abscess, for in the latter case your incision must include the periosteum.

Only last week we operated upon a woman in Dorcas, who was sent in with otorrhœa following on influenza a fortnight previously. On examining her membrane there was a large perforation, and behind the ear there was a recent incision, which had been made at another hospital and sent in as a case of acute mastoid abscess. We opened up this incision, expecting to find a subperiosteal mastoid abscess, and a fistulous track extending into the antrum. But we found that the previous incision only went into the soft parts, and on carrying it deeper the periosteum was found to be healthy, and the subjacent

bone normal. Nothing was done to her antrum, her temperature has come down, and her condition is now satisfactory—four days afterwards.

A similar swelling may be due to cellulitis around the ear, secondary to boils in meatus. The diagnosis of this from antral disease is decidedly difficult. A great argument in favour of the swelling over the mastoid being due to cellulitis is the presence of boils in the meatus. The tenderness to pressure with a boil is nearly always over the tragus, whereas in acute mastoid disease the tenderness to pressure is over the mastoid antrum above and behind the ear. Again, in acute mastoid disease the hearing is nearly always very much diminished, but when a boil is the cause of the swelling, unless the meatus is completely closed, there is no reason why the hearing should be diminished. In regard to pain, pyrexia, rapid pulse, and constitutional disturbance, you can make no differential diagnosis. One of the first cases of a boil in the meatus I was called upon to treat was in a Guy's H.-S., who had so much pain and felt so ill that he quite thought he had some acute suppuration in the antrum. It is not uncommon to see the subjects of boils in the ear with a temperature of 102° and a pulse over 100, acute pain, sleeplessness, and a feeling of general illness. But you notice that the meatus is decidedly tender as you introduce the speculum, all movements of the ear are uncomfortable, and you learn that talking, eating, and lying on that side are painful. Moreover, on testing with the watch, you find that hearing is not diminished, or only slightly so. If in doubt, make an incision over the swollen area, and if you find normal periosteum and a normal mastoid process you can be certain the trouble was secondary to meatal inflammation. It is better to do this than to leave untreated the other possibility.

There is only one line of treatment for uncomplicated acute mastoid disease, and that is the opening of the antrum by a curved incision behind the ear. This must be followed by a thorough systematic exploration and evacuation of all cells leading into the antrum, and of all suspicious sinuses, and the removal of all carious bone met with.

The outer cortical layers of bone must be so freely removed that the bottom of the bone wound is the narrowest part of a funnel-shaped cavity, and all its walls must be made as smooth and clean as possible. The middle ear is not touched at all, nor is any effort made to syringe lotion through it. All pus is carefully mopped out, and the whole cavity is firmly packed with gauze, no sutures being used. Such an operation is known as antrectomy, or Schwartze's operation.

The postauricular wound is swabbed out with hydrogen peroxide and packed daily or every other day, so that it must granulate up from the bottom. The meatus and middle ear are cleansed daily by syringing with carbolic lotion (1 in 60) or with another antiseptic If this is done the tympanic mischief will usually subside and the otorrhœa cease before the postauricular wound heals. Nevertheless, in some cases discharge from the middle ear will continue even though the antrum has been properly opened and drained, because in them there is chronic and not acute bone disease; and the only thing which will cure such a condition is a complete mastoid operation, undertaken at a later date.

Pupils' Physical Society.

A PATHOLOGICAL Evening was held in the Wills Library on Saturday, February 10th, 1906, at 8 p.m. Mr. H. C. Cameron was the President in the chair. The following specimens were shown and discussed:—

1. A newborn infant with a defective anterior abdominal wall and an ectopion vesicæ. On to the exposed posterior wall of the bladder opened two ureters, two vasa deferentia, and the rectum; the condition being one of persistent cloaca. There was a separate proctodæum, not reaching the hind-gut. All the abdominal viscera had prolapsed, pushing the deformed bladder and abdominal wall forwards and downwards as a large ventral hernia. By Mr. W. W. Mollison.

2. Uterus removed by Wertheimer's method, for infiltrating epithelioma of the cervix.
By Mr. Allison, who described the new operation at length.

3. A peculiar nodulated liver from a girl of 9. ? Congenital syphilitic. The cause of death was pneumococcal peritonitis, which was apparently quite unconnected with the liver condition. By Mr. H. S. Knight.

4. Chronic hydrosalpinx, with ovarian abscess.
By Mr. T. B. Layton.

5. Endothelioma, the size of a melon, removed from the sheath of the rectus femoris muscle.
By Mr. Davies-Colley, who also showed an excellent microscope section of the tumour.

6. Secondary melanotic sarcoma in the brain. The primary growth was not found; the only organs free were the liver, kidneys and eyes. All other organs, and the skin, contained multiple deposits. A microscope section of one of the latter in the heart was exhibited.
By Mr. Chase.

7. Enchondroma of the femur. By Mr. Tracy.

8. Tuberculous disease of ankle, starting in os calcis.
By Mr. Tracy.

9. Carcinoma of ascending colon. The symptoms had been typical of intestinal obstruction. Laparotomy had been performed, but the growth not found. It was only discovered with some difficulty at the autopsy.

10. Fibromyoma of the uterus undergoing sarcomatous degeneration. A microscope slide of the specimen was also exhibited. By Mr. Rankine.

11. Primary sarcoma of the lung. Two recent specimens. By Mr. C. W. Green.

12. A second specimen of fractured clavicle from the dissecting room; showing the mode of repair, and the way the end of a fragment may indent the subclavian artery and gradually cause an aneurysm.

Altogether thirty-four members were present; and Messrs. Mollison, Allison, Knight, Layton, Davies-Colley, Chase, Tracy, Rankine, O. W. Green, F. W. M. Palmer, Sheaf, A. W. M. Palmer, Cameron, Stevenson, May, and the two Secretaries, joined in the discussions. The meeting adjourned to coffee at 9.50 p.m.

Attention is called to the fact that the Treasurer's Prize Essay will be read before the Society on Saturday, March 10th next, when Dr. G. Newton Pitt has kindly consented to take the chair. Intending competitors must send their Essays to one of the Secretaries at least ten clear days previously to the meeting.

Appointments.

Civil.

BEALE, E. CLIFFORD, M.A., M.B. Cantab., F.R.C.P., has been appointed Consulting Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, N.

CLATWORTHY, J. H., M.B. Lond., M.R.C.S., L.R.C.P., has been appointed Resident Assistant Medical Officer, Camberwell Parish Infirmary.

GRAHAM, G. H., M.D., M.R.C.S., L.R.C.P., has been appointed Assistant Physician-in-charge of the Electrical Department, Dreadnought Hospital, Greenwich.

INGRAM, PERCY C. P., L.R.C.P. Lond., M.R.C.S., has been appointed Resident Assistant Medical Officer, Queen Charlotte Lying-in Hospital, Marylebone Road, N.W.

SCOTT, L. GRAHAM, L.R.C.P. Lond., M.R.C.S., has been appointed Anæsthetist to the Dreadnought Hospital on Mondays.

Naval and Military.

Surgeon R. F. CLARK, R.N., is promoted to be Staff Surgeon in His Majesty's Fleet.

Surgeon A. W. WERNET, R.N., has been appointed to the Plymouth Royal Naval Hospital.

Surgeon GERALD NUNN, R.N., has been appointed to the *Barham*.

Supernumerary Surgeon-Captain (Honorary Captain in the Army) GEORGE BLACK, M.B., 2nd V.B. the Royal Sussex Regiment, is absorbed into the Establishment.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Appeal of the Clubs' Union.

DEAR SIR,—When all the different sporting and literary clubs of the hospital were amalgamated into the Clubs' Union in 1891, a subscription of two guineas from each student provided ample funds for the maintenance of the constituent clubs, for in that year one hundred students entered the hospital, and in the following year one hundred and fifteen. Since then the entry has steadily declined until 1905, when it had dropped to sixty-four; so that the income from students' subscriptions fell from about £1,000 to £600 per annum.

Unfortunately the expenditure has unavoidably and steadily increased during this time owing to additional taxation and the necessity of admitting more constituent clubs.

All possible economy has been practised in the administration of the funds of the Union, and every effort was made to avoid raising the subscription, in the hope that the depression in income was only temporary. This hope has not been realised, and in the summer of 1905 the Council had to face a debt of £320. This debt was incurred during several years, and might have been avoided if the subscription had been raised to three guineas per annum some three years earlier. Thus it is clear that the members subscribing during the years 1902, 1903, 1904 and 1905 were not asked to pay a sufficiently large subscription to keep the Union from incurring the debt of £320 mentioned above.

Members who joined during these years have obtained the same benefits for eight or ten guineas as future members will get for fifteen guineas. Therefore, the Clubs' Union Council appeals to you for a donation towards paying off the debt, and hopes that you will respond generously.

At the end of 1905 the Clubs' Union Council decided by a unanimous vote to raise the subscription to three guineas per annum.

This, however, was done on the understanding that none of the new subscriptions should be used to pay off the back debts, but rather to increase the grants to the constituent clubs, and thus to benefit the subscribers, and not to pay off the debts of their predecessors.

The increase in the subscription will enable the Union to pay its way in the future if only the present debt be cleared off.

The Council feels that it may fairly ask for help, as the present debt has not been due to recklessness, but to the falling off in the number of students.

We shall be glad if you will kindly send your contribution to Mr. Croucher, at the Medical School Office.—We are, yours very truly,

G. NEWTON PITT, Chairman.
R. P. ROWLANDS, Hon. Sec.

Medical School, Guy's Hospital, London, S.E.
February, 1906.

Legal and Other Reminiscences.

BY GEORGE H. SAVAGE, M.D., F.R.C.P.

Delivered at Guy's Hospital, Saturday, February 3rd, 1906, at the Annual Dinner of Guy's Debating Society.

In responding to the toast of his health, which had been enthusiastically honoured, on the proposition of Dr. Craig, Dr. Savage said :—

GENTLEMEN,—I heartily appreciate the way in which Dr. Craig has proposed my health, and the way in which you have responded to it. I feel that I owe you something, and if I can in any way repay it I will. I enjoy coming here. As we get older, and weaker in some muscles, we get stronger in others—weaker in legs, stronger in tongue. Loquacity follows with old age. But I will not waste time on the outside of my subject. I am going to talk this evening about my personal experiences, chiefly legal, chiefly medico-legal. I trust the very first of those experiences will not be ominous in relationship with this evening.

I was house-surgeon at Guy's Hospital, and a man had been admitted who had cut his wife's throat and killed her, and had nearly succeeded in killing himself. He recovered from his wound. The lawyer who defended him was the very famous Serjeant Ballantyne, and he said, "Do you think the man was of sound mind?" "Yes." And then, in his grand way, he said, "Do you think that a man, endowed with all the blessings that a man could have, would knowingly deprive himself of the one thing he is sure of—his life?" I was preparing to say Yes, when I leaned upon the bar, which had not been closed, and I landed upon the witness of the other side. That was my first experience.

I am next going to travel over ground which Dr. Craig knows something about. One of the most interesting old criminal lunatics that remained at Bethlem when I was a student there, over forty years ago, and was there when I was assistant medical officer, and died after I had left Bethlem, was a man called Edward Hayward, otherwise "Mo." The history of this man was very interesting. He was born in St. Helena, at the time Napoleon I. was prisoner there. His father was the leading innkeeper in St. Helena. When this lad, Edward Hayward, came to be thirteen or fourteen, his father said, "Well, my boy, I am going to send you to England, and you will have a fortune." He sent him to London, and apprenticed him to an optician. He served his time, and then, his father having died, he said to his master—who was also his guardian—'Now I want my fortune." And there was a difference of opinion between his master and himself, which ended in his getting a pistol and threatening to shoot his master. At all events, he was taken before a magistrate, and as no one would be bound over for him he was for some time in prison. He was then sent to a lunatic asylum, I think directly from jail—the history is a little uncertain. An interesting point, historically, is that he was one of the last survivors of the very old system of lunatic treatment. He was in one of the suburban lunatic asylums where, on a Saturday night, he would be left tied to his bedstead, with bread and water by his side, and he would see nobody until Monday. That is a detail. He got out, and then he began to pester the Consuls and officials connected with the Colonies, with letters, letters, letters. At last he presented a petition to the young Queen as she was coming out of Buckingham Palace. She made inquiries about him, and they learned that if he did not get his own way and his petitions were not granted, he had a habit of presenting pistols. Therefore it was thought just possible that he might present a pistol at the young Queen. Therefore he was sent to Bethlem, where he spent the rest of his life. There he was billiard-marker, and in the last generation a very great number of Guy's men knew him in that capacity. He had unfortunate habits, and if you happened to put your ball down it disappeared.

Here is another reminiscence in relation to Bethlem. There was a man named Dadd, some of whose pictures I expect will be exhibited in a short time in London. He came of an extraordinarily clever family, but a very insane one. His sister was married to an Academician, and she was an artist herself. He showed extraordinary power, and if he had not become insane he would have rivalled, if not outdistanced, Watts. Those of you who have gone round Bethlem with Dr. Craig may have had pointed out to you his pictures. I have been in the habit of saying, "There is the picture of a man who cut his father's head off and then painted 'The Good Samaritan.'" The man developed hallucinations of hearing, and, unfortunately, they were of the type which were imperative; they told him what he was to do, and he did it. When in the neighbourhood of Lord Darnley's woods he heard a suggestion that he should cut his father's head off; and he did it.

And then came a very weird experience of a Frenchman. Dadd escaped, and was getting over on to the Continent. He was in a diligence going from Boulogne to Paris, and there was only one other person in the carriage, who said he was disturbed in the diligence by his fellow passenger. He could not tell what he was doing, but he felt his hand slowly passing over his face and going to his throat. Dadd admitted that he heard a voice saying "Kill him," but did not direct him how to do it. That is a very weird experience. That unfortunate man lived for very many years, and only recently died at the Criminal Lunatic Asylum at Broadmoor. He painted many pictures, a number of which were sold; but it was thought by the Government that it was improper that these pictures should be sold in open market; and the Superintendent of Broadmoor, therefore, to prevent anything of the sort being further carried out, allowed him to paint the walls, which he continued to do in a very elaborate way.

Next I would refer to some of my experiences in murder cases. I used to have a fair amount to do with the Home Office in that relationship—very responsible work—but I did not like it. But one has to remember that there is a procedure nowadays which relieves any central specialist. Supposing a man is condemned to death in a certain county and his sanity is called into question, almost automatically the superintendent of the nearest asylum is called in, and his judgment is almost always accepted. Twenty years ago it was not so; the question was fought out whether he was sane or insane; there would be three or four witnesses saying he was sane, and three or four saying he was insane. Not infrequently I used to be asked to give the casting vote, and I naturally felt the grave responsibility. I spoke to one of the judges, and he said, "You have got nothing to do with consequences; you have merely to say whether the man is sane or insane." That is all very well, but, especially if you are somewhat tender-hearted, you feel the responsibility.

The first case in point which I will refer to was that of a small boy, only twelve years of age, who had rather a bad record at school, from the fact that he was always appearing to be learning, but never learned. The master said he had had 4,000 children through his hands, and had not met with such a boy before. He was docile, but was not good at games or work. He was a quiet boy. The father tried to teach him to be a cobbler, but failed. Then the boy was allowed to ramble about and amuse himself, apparently always reading books, but not gaining anything from them. One day he came in, and finding his little sister half asleep, sitting by the fire, he seized his father's hammer and killed her, and then went out for a walk. On returning and finding his parents in great distress, he asked what all the fuss was about, and said he wanted his supper. When I heard of the stupidity of the boy I thought there would be no difficulty about his case. It happened to be in Hertfordshire, and on the estate of a man who had a brother who had been called to the Bar, but not to practise. The proprietor insisted on his brother taking up the case. I never had a worse client in my life; every hour in the day he was coming in to ask whether some other plea could not be raised. At last we got before the late Lord Coleridge, and I gave my evidence. "Did you find insanity in this lad?" I said, "He was a solitary boy; he was always poring over books, but never learned anything; he never played games." Lord Coleridge said, "That describes Shelley." I said, "Well, my lord." That was an unfortunate remark of mine, for when the judge summed up, he said, "Gentlemen of the jury, we have had expert evidence; a gentleman has given you evidence that this boy was insane because he was like Shelley. Gentlemen, this cannot be. If you find him insane, this poor boy will be sent to the Criminal Lunatic Asylum to be detained during Her Majesty's pleasure, to associate with criminal lunatics. If, on the other hand, you find him guilty of manslaughter, it will rest with me." It did, and he gave him fourteen years' penal servitude. I have heard of that boy, and watched him since, and he is completely weak-minded and useless.

Next, there was one of those cases in which there was so much planning in the murder that it was really difficult to persuade the jury. In fact, I heard afterwards that certain people were lying in wait to mob Sir Charles Russell and myself, but we succeeded in getting him off, and escaping. This was the case. The man's father was very wealthy, and he had several sons, one of whom was a ne'er-do-well. Yet he was not intemperate nor vicious, but he always failed. His father started him in a business in South America. He lost his £8,000 or £10,000 and came home, saying, "It is not my fault." He was started somewhere else, with another £10,000. At the end of a few years he came back again, and said, "it is not my fault, it is your fault; you start me in a Colony which is not suitable, or in a business which is not successful." This occurred a third time, and then the father said, "I have had enough of this; I will allow you £200 a year, and not put you into a business." He was living in a London flat alone, and his landlady was surprised to find that he was practising with a revolver, firing at the fire-grate. She remonstrated, and then it was found that he practised elsewhere. He went down to the City where his father was living, and watched his habits. Then he stored the whole of his furniture in a depository, went down to a small inn in the City, and there took the first opportunity, when his father was going to walk from his house to his club, as he did daily after breakfast, to shoot him in the back. You would perhaps say that the whole thing was so carefully planned that he should have been hanged; perhaps he should have been. But there is no doubt he believed his father was intentionally making a fool of him all his life, that he had started him in businesses one after another on purpose to bully him and abuse him for being a failure. If you test him by the rule which is still supposed to hold, that a man is guilty if he knows the nature and quality of his act, he was guilty; but I believe his conduct was guided entirely by insane delusion.

Now comes one of the saddest cases I ever had to deal with. It was in a man who had not always been temperate, a man with property bringing in about £15,000 a year in the North of England. He was a man who had hunted and fished and led a fairly healthy life, although he perhaps took more alcohol than was good for him. He gave that up, and married a very suitable lady indeed, and for a year or two they were ideally happy. There was one drawback; there was no child. He felt it, she felt it, but they said, "We are everything to each other, and we shall get on very well without a family." One day he said, "Look here; they are going to make a new drive from the gate through the woods just opposite the house; shall you and I do some felling of the timber? We will take a bill-hook, and you shall cut some saplings." He went and cut some saplings in the line to be taken, and the last thing he remembers

saying was, "My dear, go away, I shall kill you," and her saying, "Kill me? that's the last thing you would dream of." No more. Half an hour afterwards he was found washing his waistcoat in the lavatory, wondering what on earth had caused such a mess of blood about. The doctor and his wife, who lived about a mile away, were paying an afternoon call, and they said to him, "Where is your wife?" He said, "I don't know: she is sure to be in to afternoon tea: sit down." They waited. Then he said, "Very funny my wife does not come in." Presently one of the servants rushed in. She had been found cut to pieces. There she was in this drive, with a gash which almost took her head off, another right through her chest, another through her pelvis. I was summoned to see him in a condition of acute mania. There was very little doubt that he had some epileptic or epileptiform attacks, during which he did these automatic acts.

It is only a month since I saw an almost exactly parallel case, as far as epileptic unconsciousness was concerned, in a man who attempted suicide. This man was playing the piano with his wife and friend, when he got up and said, "I had better go and dress for dinner." His wife heard him go upstairs, then she heard him go down again and open the front door. She thought, as he was a careful man, he had got a new motor-car, and he was very keen about the motor himself; he was in the habit of going last thing to see if the chauffeur had put everything in order. Dinner-time came, and he was not there, and she began to be anxious, but thought he had gone over to see a neighbour. No. Then they set to work to search, and he was found not one hundred yards from the house with two severe wounds in his throat, and near him a chisel with which he had inflicted them. The first thing he recollected after rising from the piano was being lifted on to an ambulance to be taken to the local hospital. There was not a thing to account for his conduct; there was absolute temperance, circumstances extremely good, perfectly happy, the whole surroundings as ideal as could be. But as a child he had had convulsions, and epileptic fits later, and now he had had a slight epileptic attack, during which he did this crime on himself. Although it used to be supposed that anything in the shape of epilepsy was a good excuse, it is rarely a very good excuse in a defence for murder. Still, as I have pointed out, it is a justifiable one sometimes.

Next on the list of horrors comes, I think, one of the saddest and most pathetic cases I have ever come across. I was sent by the Government to the North of England to see a man who had the worst possible character for drunkenness and misbehaviour for a year or two, having for years before a perfect history. He is still at Broadmoor. He was brought up extremely strictly as a Primitive Methodist. He had definitely known the hour when he believed himself to be "called" as a Christian; he knew he was saved, and of the "elect." He married a very sensible woman, who was a good wife. They had several children and were perfectly comfortable and happy. But she had not been "called," and that was the grievance. "My dear, if you die you will go to hell, and we shall never see each other again." She said, "I was brought up in the Church of England, and I shall die in the Church of England." She developed phthisis and did die. 'She has gone to hell; so will I." He gave up all his good ways, took to drink and every form of vice, and committed murder. I had to see him. You would scarcely credit that sort of tale if one did not tell you all about it.

In the next group I shall pass on to more interesting things—some memories in relationship to what are called inquisitions, or inquiries. Many years ago I had to go down to Bristol to give evidence about a man who suffered from what was called the delirium of persecution. He said, "There is a system of emasculation going about; there are 'runners' all over England, chiefly subsidised by private asylum proprietors, who go about the country, castrating Her Majesty's male subjects." He was found with a long knife, watching for these runners, and it was considered that anyone who came in his way stood a chance of being mistaken for one. There was very little doubt about the man having a delusion. And that reminds me, in passing, that the counsel is now a judge. He said to each witness in turn, "Will you give me your definition of a delusion?" Witnesses were kept out of court, but we heard that this was being asked. So when I was put in for evidence I avoided the word "delusion." He said, "Now, Dr. Savage, your definition of a delusion." "I did not make use of the word." He said, "You can't." I said, "I won't." "But I want it." I said, "Your father's book is in front of you." "Will you be bound by that?" I said, "Certainly not." And so ended my cross-examination. The next thing was, the person whose lunacy was called in question was asked if he had anything to say to the jury. I remember he had long shirt cuffs, which he repeatedly thrust down, and he said, "Gentlemen of the jury, my sanity is called in question because I say there is a system of emasculation going on in England. Gentlemen of the jury, you know that half of you are cut." It went home, but it was not in his favour."

One of the most interesting inquiries—and I am afraid I must say one of the most disastrous, if one is to look upon the moral, legal, and general questions—was this: We may here give the name, because it was that of Mrs. Cathcart, who ruined herself by litigation. No sooner did she employ a solicitor than she got another solicitor to watch him, and generally had detectives to watch both. I said, "Why did you get rid of the Attorney-General in such and such a case?" "I saw him outside a pawnbroker's shop, standing under the three balls." I said, "I don't understand." She said, "That means he was bribed." I am afraid that case did not redound to medical credit at first. I admit she was an extremely difficult person to handle; she was very cautious and would not see see doctors if she could help it. So it was decided, when she was in court propounding one of her

theories as to the legality or illegality of something, one of the police surgeons watched her, got into conversation with her, and signed an urgency certificate; her husband was in an adjoining room and signed the petition and statement, a carriage and pair and two nurses from an asylum were there, and kidnapped her. It was wicked and altogether wrong. I saw her the next day, and I shall never forget my astonishment. At first she wanted to know who I was and what I had come for. She was very deaf, but we managed fairly well, and at last we got so friendly that she said, "I will show you everything," and I felt like Joseph. She lifted up her skirts and then her underskirt, and I wondered. Then she lifted up another skirt, and there were in a marsupial pocket, collections of papers. She had there a huge sack containing all the pieces of evidence pointing to the persecution she was suffering from. The case was so notorious, and the individual so insane, that everybody recognised it. Nevertheless, she was discharged by the lunacy authorities as being not insane. She then proceeded to take actions against everybody. Later there was a full inquisition, when I had to give evidence against her in her presence. And there, again, I was a sufferer, and I am not sure that the suffering and injustice of that day have passed yet. The leading counsel became a judge—I will not mention his name, and he is no longer living. He had, if you please, the audacity, in cross-examination, to say, "Well, you were at Bethlem Hospital. You are not there now?" "No." "You have had to leave. Now, look here, you are on your oath. In consequence of brutal ill-treatment of patients had not you to leave?" Of course, our counsel said, "Is there a word of truth in any such suggestion?" And I replied, "None whatever." A year or two afterwards I was appointed, with the late Speaker of the House of Commons, to undertake an investigation into the management of an asylum. That truthful paper, "Truth," said, "We approve of the appointment of Mr. Gully, but as to the appointment of Dr. Savage, who is so well known to have had to leave Bethlem in consequence of having ill-treated patients ——." Even since then the same thing has been definitely stated as a fact. I say that is a warning as showing the licence that counsel may be allowed. Of course counsel do take liberties sometimes, but if you keep your head you can retaliate. I was giving evidence only two years ago at another inquiry, where an elderly lady had fallen into very evil hands and was being pillaged. I went down and saw her, and was convinced that she was unfit to manage her affairs, and I was prepared to give evidence. King's Counsel: "Didn't you rush and bamboozle this old lady?" I took no notice. He said, "I asked you a question." I turned to the Master. "I decline to answer any question from that counsel till he withdraws and apologises." He said, "I withdraw." I said, "No, and apologise." This he did too. As I left the court, someone I did not know, with golfing tendencies, said, "Two up, I think?"

Another inquiry which interested me was this: There was a certain clergyman, belonging to a noble but very neurotic family, who had behaved strangely for some time. He was a very wealthy man, and greatly given to church bells. He had spent a very large amount of money on bells for his own and other churches. Those bells talked, he said, to him, and told him all sorts of funny things. The chief man in the neighbourhood died, and he, being the chief clergyman in the district, was to bury him. But just as the funeral cortegè started he had a spiritual intimation that he was not to bury him. He straightway went to the lych gate and refused to officiate. There was another church not very far off, and the body was taken there, and the service was completed, except the interment, for which they brought it back. It was a sunshiny day, but the clergyman was found dancing over the grave with an umbrella. He was removed, and the funeral completed. Of course there was an awful rumpus. This happened on a Friday, and it was said there would be a fearful storm in the church on Sunday. So his brother came to me, and I went straightaway. I found the people there the most arrant cowards possible. So I said, "Are you going to the Rectory with me?" "Oh, neither of us is going?" I said, "How on earth shall I manage?" They said, "You must go and see him." So I drove the mile or mile and a half to see him. I had been told some of his peculiarities. I asked the housekeeper if I could see him. "He is busy with his sermon for to-morrow." I said, "I must see him." I was able to so far ingratiate myself as to get him to talk about bells and priests and things in general. He told me he had selected the right oculist to consult in former years by spirits, and he believed in them implicitly. He said, "Will you stop and dine?" I said, "No, thank you, I cannot." And then—you can imagine my feelings—he said, "Good-bye; have you got the straight waistcoat in your pocket?" I thought, in my innocence, that I had beguiled him entirely. At all events, the unfortunate gentleman went to an asylum, where he is to this day. An inquiry was held on him, and he caused a considerable amount of amusement in court. He had a magnificent signet ring; I believe it was a very old Roman one, and directly an opposing witness entered the box he focussed him with this ring. The whole time I was in the box I was being focnssed with this very fine ring. It, however, did not affect me or my evidence.

Now for another group of cases altogether—nullity cases. One of the earliest was that of a nobleman, who applied for nullity but did not get it. But at about the same time I was called under the following conditions to see a young woman, the daughter of an innkeeper, and this point was of very great interest. She was the offspring of an insane father, begotten within a month of his being discharged recovered from a county asylum. At all events, she was somewhat emotional and hysterical. This young fellow got engaged to her, and everything went well until, within a few months of the wedding,

his future mother-in-law informed him he had better not come down, as she was very hysterical; he had better come down on the wedding morning, and it would be all right. Of course, he must have been soft to have submitted to that, but he did. He was rather surprised to find that his bride was not gushing, and seemed to be "groggy." But the marriage ceremony went through, and they came to a little house in the neighbourhood which he had taken. She went to the bridal chamber, and in course of time he went there, and he found her with hat, cloak, and boots on, outside the bed. He spoke to her, but she took no notice. He was a very common-sense young man; he took off his clothes, went into bed, and said he slept. At all events, he sent for me in the morning. Action was taken for nullity, and of course he got a nullity declared. It is very difficult to quite understand the law in relationship to things of this kind. For instance, I remember a lady being admitted into Bethlem Hospital under these conditions. She had had an attack of insanity in India, and was convalescing, but was not well. She was sent off to England under insufficient care and control. The result was adultery on board ship. Her husband heard of it, and by the time she arrived in England she was so insane that she had to be sent to Bethlem. There was no doubt she was insane when the adultery was committed, but the plea was not accepted. In another case a man had had many recurrent attacks of insanity, and during one of them he was guilty of adultery, and his wife succeeded in getting a divorce, notwithstanding that all the acts were done while he was insane.

The next question is that of kleptomania. At one time I was more tolerant of those cases, and used to defend them; but I have got rather cowardly in my advancing years in relationship to two or three cases. Just as I avoid murder cases, I avoid kleptomaniacs, because I am certain I have been taken in on more than one occasion; the people were thieves, not kleptomaniacs. I remember there was one, the son of a member of Parliament, who was extremely sensible in that relationship. He had stolen a lot of things. He had taken a flat, and there was a chamber which was kept locked up. He said all the family plate was there; but he had pawned it. I went to see him in a Holloway house of detention, and he said, "My dear Dr. Savage, I would rather fall into the hands of the law than fall into the hands of the lunacy people." I said, "I think you are reasonable." He said, "I have looked carefully into it, and if I am found guilty I may have six months. I do not think I shall. If, on the other hand, I am found not to be of sound mind, and I am sent to Broadmoor, goodness only knows when Her Majesty's pleasure may let me out." That man was certainly a thief, not a kleptomaniac. I have defended cases where one felt sure one was doing the best and the most just thing.

Take an example of this. An American lady of great wealth had a banking account with several thousand pounds to do as she liked with. She goes to hotels and steals serviettes and plated goods, things worth practically nothing, stowing them away most carefully. The whole of that conduct is so unreasonable that one is justified in saying she is a kleptomaniac. It is interesting that nearly all genuine kleptomaniacs are women about at the menopause, or belong to highly neurotic families.

Probably I have a larger experience of wills than of almost any other form of medico-legal work. I have recently said I should give up going to the courts, but counsel say, "We should miss you." I thank them for their expression, but say, "I am getting deaf." But there is one very big case I hope to see through before I retire from that kind of work.

One that struck me very much was this, because it was a good typical case of senile weakmindedness. A man, worth £600,000, had been a sober hard-working manufacturer in the North of England, a collector of pictures, and fond of his garden. Nevertheless, he began to develop chiefly visual hallucinations. And it is interesting that so many of these cases develop such visual hullucinations. When I went to see him he said, "Look here, don't you see that water running across the floor?" "No." "But I do; and it is very funny, I have taken blotting-paper, and it does not get wet." "Therefore you feel water is there, but you know it is not?" "Yes." "Then about these rabbits. Do you see that old doe and six little ones running in and out of those bushes?" "No." "But I do." The real question at issue in the inquisition, which was some time before his death, was this—whether a man with such marked hallucinations was of sound mind. Well, of course he was of unscund mind. Next, lock him up, as his nephew wished. I say, "No. This man, although of unsound mind, is worth £600,000, and he has got a detached house and grounds here. Surely you can give him a resident doctor and two or three attendants to look after him if necessary." But it was fought out to the bitter end. The first plea was that he was of unsound mind and ought to be locked up. They lost that. It was found, on the other hand, that he was unfit to manage his affairs. A man like that would be very liable to make mistakes in managing his fortune, but it was not necessary to lock him up. As soon as he was dead the whole thing was raised again: Is a man who has a definite delusion a man who can make a will? And that question is constantly cropping up.

Here again, in passing, I would say—for I want to put practical questions as well—a common thing, when a man is getting very old, is to make many wills. One has known judges and leading barristers who have made wills by the dozen, many of them undated, and at the last goodness knows which was the last. If you are to give evidence in will cases—they will not let you have the originals—have photograph copies, so that when you are asked in the witness-box whether you have seen the will, you can ask which; and you have your photograph to refer to. I sometimes think of the danger of success. In one case I was rather proud that I had been able to

substantiate the will of a general paralytic. He had a completely lucid interval, when he was as sane as he had ever been, and then he made the will. The people who opposed his will said, "Here is a general paralytic, and surely, if your diagnosis was originally right, he never could have made a proper will." But we substantiated the lucidity, and the will was proved.

A short time afterwards I had to give evidence on the other side. I had been sent to see a man who was in the third stage of general paralysis—dirty, paralysed, demented. "You have given evidence, I believe, in another case that a general paralytic may have a lucid interval and make a will?" "Yes, but that is not the subject." "Sir, I ask you whether a general paralytic may have a lucid interval?" "Yes, but——." "No," but still I got it in edgewise. And afterwards I said to the judge, "I am misrepresented." Then, of course, counsel said, "Is this expert witness to be allowed to address the jury, my lord?" At all events, I didn't. In this case the will of a dement was proved, I think, wrongly.

Next, one would refer to one of the funniest incidents of my life in court. I was giving evidence in a will case, and the cross-examining counsel, whom I knew personally very well, got up and smiled upon me and asked me a question. I said, "No." He asked another question, and I said, "No." He said, "But surely you will agree with this," and he held up my Manual. "No." "But," he said, "this is your own!" I said, "First Edition!" Fortunately for me, the first edition had blue edges, but the others had not. He did not ask me any more questions.

Now to sum up. Do not hesitate when you are asked a question by counsel. Of course if you do not understand the question say, "I do not follow you," then you will have it repeated. On one occasion another expert and I were on opposing sides, and at the end he said, "That d—— convenient stammer you put in gave you time to think." Give the best and the absolutely truthful answer; if it is not what you really meant and you see that a wrong use is being made of it, let them think they have got you round the neck, and lead on and on in the wrong direction, and then when they have got a thorough chain from the start you can say, "My lord, that first question was misunderstood." But if you hum and ha at a question they will not believe you. Then, wherever you are as a witness, for goodness sake don't be a partisan. I constantly say, if I am asked to go as a witness, "I will go, and I will be called by counsel if you like; but if they ask complicated questions which go against you I shall answer truly: I am not a partisan." And when you go into practice one of the first things you should do is to invest 10s. 6d. in the Medical Defence Union. Why? Take the last example, of a certain lady, with certain peculiar habits, perhaps. I was called to see her in the Midlands, with the history that she had about forty dogs in the house. It happened to be July, and one or two of them had died. She preferred to keep them still in her room. She was also so suspicous about them that she had £5 worth of meat sent into her bedroom, which she cooked for herself and dogs. But she thought the food was not good enough for either of them, and buried the lot. She thought about two dozen of the dogs ought to have a change of air, and she had a first-class express train from the Midlands to Folkestone, at a cost of £150, to take them to Folkestone. Then she had a courier to take them to Paris. This seemed to me slightly unreasonable, and I told her so. She smiled upon me and said, "Do you know what is reasonable in the heiress to a million?" "I don't." It was decided by the Commissioners in Lunacy that she should not be considered a lunatic. She stopped as a voluntary boarder in an asylum for a time, then she left. Then she proceeded, having fallen into the hands of lawyers, to enter an action against me. All I did was to refer her to the Medical Defence Union. They got notes of the evidence that I had been instructed in, the case was brought on, and I heard no more about it, except a telegram from the court, "Case thrown up." So if you act straightforwardly, if you sign a certificate in good faith, no harm can come to you.

And now, gentlemen, I have been talking for a solid hour, and it only remains for me to thank you for your kind attention. (Cheers.)

Dental News.

Notes of a Dental Clinical Lecture by Mr. DOWSETT.
Friday, January 26th, 1906.
(Continued from last issue.)

Metal cap splint.—The next kind of splint is what is generally known as a Tomes' splint. The principle of this again is that it fixes one fragment to the other by a rigid appliance fixed over the teeth, but can also be made to get a certain amount of hold upon the alveolar process. It is therefore applicable when the conditions are similar to those for a "Hammond," except that it can be used when fewer teeth are standing, or even when the teeth happen to be loose. Another condition under which it is advisable to use this form in preference to a "Hammond," is when the general state of the patient, from other severe injuries, would preclude the extra manipulation necessary with a "Hammond." The is made usually of German silver, about No. 5 gauge, to a rectified model by striking it up over all the teeth and slightly overlapping the alveolus.

Double splints.—Lastly, we come to the Gunning type of splint. This is a double splint, fitting both upper and lower jaws, and fixed together at the sides, whereby the mandible is fixed immovably in its correct position against the maxilla. This form is applicable :—

1. When the molar region, angle or verticle ramus is fractured.
2. When more than one fracture is present.
3. When few or no teeth are standing.
4. When there is great difficulty in rectifying displacement.

The splint is made of either vulcanite or metal, usually the former. The rectified lower model and the upper should for preference be rigged upon an anatomical articulator of some sort, as this will obviate the necessity of tying the splint in, before joining together to get a correct "bite," and will prevent discomfort to the patient if the splint should be made with an incorrect bite. The lower part should cover all the teeth in the mandible, extending well over the molars, but it is usually sufficient to only cover the molars in the maxilla. When the splint is in position, one of the forms of bandage should then be applied tightly, to keep the fragments of the mandible in the splint.

The most important thing is to put the splint on as soon as possible after the accident. If put on within the first twenty-four hours, an efficient splint can be removed in fourteen days, if no suppuration supervene. Roughly, we may say that the splint may have to be worn anything from two to eight weeks.

No bandage, under any circumstances, should be removed by the patient, as he may in a very short time, by trying to move the jaw, undo a week's repair. Wholly slop diet must be taken when the patient is wearing a "Gunning," as of course the jaw is fixed. Soft foods that require only a very little mastication may be taken with Hammond's and Tomes' splints. And lastly, the patient should frequently use a good mouthwash and a tooth-brush.

Fractures in and behind the molar region may be, and often have been, very efficiently treated by wiring the bone, although, if cut down upon from the outside, scarring results; if from the mouth, sepsis may supervene and lead to much trouble. With fractures anywhere in front of the molar region, it seems to me, it is seldom justifiable to wire the mandible. The principal reason being, that such fractures are nearly always compound into the mouth, and therefore septic before treatment is commenced, and if wired, grave trouble is very likely to occur in the form of severe suppuration and necrosis around the ends of the fragments, and sloughing out of the wire, all of which have often happened when treated in this way.

Change of Address.

Dr. A. E. Cawston, from 78, Handen Road, Lee, S.E., to Becket House, Wantage, Berks.

Mr. Thomas A. Chignell, L.D.S., from the Shrubbery, Bitterne, to Keppel Lodge, Emsworth, Hants.

Mr. A. Hammond-Smith, L.D.S., from 6, Weymouth Street, W., to 23, Henrietta Street, Cavendish Square, W.

Dr. N. Ivens Spriggs, from Guy's Hospital, to 1, Leyland Road, Southport.

Mr. J. W. Walton, L.D.S., from Swadford House, Shipton, to 47, Park Street, Bridgend, Glam.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Guy's Hospital Debating Society.

THE Seventy-second Ordinary Meeting of the Debating Society was held in the College Smoking Room on Saturday, February 17th, being the occasion of the Annual Ladies' Evening. Dr. Savage was in the Chair. The minutes of the previous meeting having been read and signed, Mr. Goble rose and made some comments about the notices of the meeting. His remarks having been satisfactorily disposed of by the senior secretary, Dr. Savage called upon Mr. Wacher to propose "That this House deplores the luxury of the present age, and advocates a return to the simple life." Mr. Mann opposed the motion. Messrs. O'Callaghan and Goble seconded the proposition and opposition respectively. Dr. Savage briefly indicated the lines of the discussion whilst the House collected its thoughts. The following took part in the discussion:—Messrs. Orpen, Watney, Thompson, Barker, Myott, Stebbing, Ormond and Spriggs. The proposer and opposer having replied, Dr. Savage summed up and put the motion to the House. On a division being taken, the motion was declared carried by 34 votes to 32. A vote of thanks to Dr. Savage for kindly taking the chair was carried with acclamation. Dr. Savage briefly replied, and the meeting broke up to partake of refreshments.

Pass List.

University of London, January, 1906.

INTERMEDIATE EXAMINATION IN MEDICINE.

M. E. Ball, *†H. O. Brookhouse, L. Croft, T. Evans, F. W. Hogarth, K. H. Hole, †‡H. I. Janmahomed, A. N. Leeming, A. E. Lees, H. C. Lucey, C. H. Marshall, J. B. Martin, H. E. H. Mitchell, P. S. Price, D. Reynolds, T. Stansfield, H. Stott.

*Distinguished in Anatomy. †Distinguished in Physiology. ‡Distinguished in Pharmacology.

PRELIMINARY SCIENTIFIC EXAMINATION.

PART II.

ORGANIC CHEMISTRY.—J. Lee Atkinson, G. B. Cockrem, C. H. Crump, F. W. Hogarth, D. A. Mitchell, T. T. O'Callaghan, C. Witts.

PART I.

INORGANIC CHEMISTRY, EXPERIMENTAL PHYSICS AND BIOLOGY.—*P. J. Monaghan, *D. H. M. Silvanus, *P. Smith, *G. Y. Thomson, *D. H. Wood.

INORGANIC CHEMISTRY AND BIOLOGY. — *J. A. Edmond, *J. L. Stewart.

INORGANIC CHEMISTRY ONLY.—*W. E. Fox, *G. T. Mullally, *R. Stout, †B. T. Verver.

EXPERIMENTAL PHYSICS ONLY.—†E. A. Barker.

BIOLOGY ONLY.—L. B. Stringer, S. Wilson.

*Denotes completion of examination. †Already passed in Biology.

Conjoint Examining Board in England.

DIPLOMA IN PUBLIC HEALTH.
Lieutenant-Colonel T. B. Winter, R.A.M.C.

NAVAL MEDICAL DEPARTMENT.
F. G. Goble. P. F. Minett.

Reviews.

The price of books submitted for review should in every case be stated.

Practical Sanitary Science. By D. Sommerville. (Ballière, Tyndall & Cox.) Pp. 310. Price 10s. 6d.

This book is described as a hand-book for the public health laboratory, but only few methods are described, on the ground that a few tools well used are better than a multitude ill applied. The text consists for the main of a general resumé of the subject under discussion rather of the nature of notes than of a text-book description, indeed the student is advised to constantly apply to text-books for fuller information while working through the book, and this is followed by a description of the different tests for constituents and impurities. However, as a practical book for use in the laboratory we think it a little inconvenient, as each step as described is not definitely marked off from other stages in the same experiment, also facilities for referring fron one part of the book to another are not good.

The actual subject-matter is, we think, trustworthy, though in places too loosely expressed, as, for instance, "Beer is said to be produced by the fermentation of malt and hops;" does the author mean that hops undergo fermentation or not? Again, talking of wine, he says, "It is probable that no wine improves in quality after a period of ten or fifteen years": is quality to be determined by the amount of alcohol or of the other constituents?

One point on which the author strongly insists is the bacteriological standardisation of disinfectants, and when we think of the number of worthless articles called disinfectants on the market at the present time, we heartily uphold his appeal.

The chapters on bacteriology are very scanty and of no practical value.

There are numerous illustrations, the photographs being good, but a series of diagrams of water sediment is too crude.

The work is completed with a large appendix on reagents and reactions employed in the laboratory.

Landmarks and Surface Markings of the Human Body. By L. B. Rawling, M.B., B.C. Contab., F.R.C.S. Eng. Second Edition. (H. K. Lewis). pp. 96. Price 5/- nett.

The usefulness of this little book is attested by the fact that this is the second edition, the first having been reviewed in our columns less than a year ago. Numerous additions and alterations have been made, and we are pleased to see that all our suggestions have been carried out. In the pictures of cerebro-spinal topography the various landmarks are each indicated on the dried bone, and also on the same page on the part as it presents itself for examination during life, making comparison beautifully easy. Throughout the book the diagrams are extremely clear and instructive without too many points being put into any one figure. The letterpress is full, but not redundant, and each structure described is referred to its own particular diagram by a sidenote.

It is quite the best book on surface anatomy that we have seen, and should be read by all students of anatomy, whether surgical or descriptive.

Recent Additions to the Wills Library.

PRESENTED BY THE PUBLISHERS.

Mr. E. Arnold—
Hill's Recent Advances in Physiology and Bio-Chemistry.

Bale, Sons & Danielsson—
Braun's Animal Parasites.

Baillière, Tindall & Cox—
Stewart's Physiology—Fifth Edition.

Cassell & Co.—
Batty-Shaw's Organotherapy.

A. & J. Churchill—
Whittaker's Essentials of Surface Anatomy.

Constable & Co.—
Dudgeon & Sargent's Bacteriology of Peritonitis.
Manson's Tropical Diseases.

H. J. Glaisher—
McLatchie's Electrolysis.

W. Green & Sons—
Berry's Surface Anatomy.

H. K. Lewis—
Rawling's Landmarks and Surface Markings—Second Edition.

Macmillan & Co.—
Huggard's Clinical Treatment.

The Rebman Co.—
Gould's Biographic Clinics.
Jardine's Clinical Obstetrics.

The Scientific Press—
Burrow's Surgical Instruments and Appliances.

Voysey's Nursing: Hints to Probationers on Practica Nursing.

Woollacott's Nursing of Infective Diseases.

All new works presented by the Publishers are kept in a special bookcase conveniently placed for anyone desiring to inspect them, and reviews of the books so presented will appear in the GUY'S HOSPITAL GAZETTE.

PRESENTED BY THE GOVERNMENT OF INDIA.

Scientific Memoirs—

A Preliminary Report on a Parasite found in Persons suffering from Enlargement of the Spleen in India.

Second Report of the Anti-Malarial Operations at Mian Mir, 1901–1903.

Specificity of Antivenomous Sera.

On a Parasite found in Persons suffering from Enlargement of the Spleen in India. Second Report.

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Directions to be followed in sending *Diphtheritic Membrane*:—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. WELLS.

NOTICE.

G. M. J., ALTON.—No tubercle bacilli are detected in this specimen of sputum, which is seen to contain much muco-pus.

PATHOLOGIST.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Sport.

Rugby Football.

GUY'S v. LENNOX.

This match with Lennox was played at Honor Oak Park, on February 10th, and resulted in a win for the Hospital, by 3 points to nil.

It was a very much debated question, whether the match ought to be played, as the ground was in a very bad condition, resulting from heavy rain following on a frost.

We had to make some alterations in our team as Jones was away, and Gibson still on the injured list. Digby played half-back with Monaghan, Harrison played centre with Lee, and Llewellyn played back.

It was still raining when the teams went on to the field, and a strong wind blew across the ground. We lost the toss, and Archer kicked off with the wind slightly against us. Little passing could be expected with the ball in such a greasy condition, and the forwards had to do all the attacking. Play settled down in our opponents twenty-five, and twice early in the game F. Alcock only just failed to score. After this the game was very even, neither side gaining any advantage, and at half-time there was no score.

The second half was very much like the first, but the exchanges were decidedly in our favour, our forwards were getting the ball much better, and in the loose they were always better than their opponents. Once our three-quarters got on the move, but the Lennox defence was very sure, and nothing came of it. During some scrambling play, the ball was kicked too hard over our opponents' goal-line, and F. Alcock followed it up, apparently unseen by the back, and in touching down looked as if he had scored, but it was given touch in goal. From one of the many forward rushes, Archer scored the try which gave us the game. Saunders failed with the kick. Just before no time, our opponents rushed the ball nearly over our goal-line, but our backs defended well and saved a score. The whistle then went and the game ended in our favour by a try to nil.

It was not a day for experiments, and Digby and Llewellyn can hardly be commented upon in strange places. Our forwards played well throughout, Archer and Alcock being most conspicuous in attack, while Hinde tackled well. Harrison was in great form.

Association Football.

GUY'S v. EMERITI.

On Wednesday, February 21st, Emeriti visited us at Honor Oak Park, and were defeated by 4 goals to nil. Guy's were weak, owing to the absence of Pedrick and Denning from the halves; but the substitutes did very good work.

Owing to the muddy state of the ground, good football was impossible, but the game was keen throughout and did Guy's much good.

Witts was the best of the forwards and scored three goals, the second one resulting from a good run and a tricky cross shot.

Wood was safe in goal and punted out well. Zorab worked hard at centre forward and scored the fourth goal from a nicely-placed centre from Barker. Team :—

GUY'S.—C. A. Wood (goal); H. Bastard, G. Robinson (backs); H. Simms, V. Townrow, M. Wormold (halves); A. Berry, C. Witts, A. Zorab, E. Barnett, F. A. Barker (forwards).

The Inter-Hospital Cup Tie will be played at Honor Oak Park, on Monday, February 26th, against Westminster Hospital.

Hockey.

GUY'S v. CHARING CROSS.

CUP TIE.

This match was played at Richmond on Monday, February 12th, before a large and distinguished company, including three Guy's men, and ended in a victory for Guy's by 12 goals to nil, a highly satisfactory result considering that we had not had any previous practice together this season. With the exception of the wing halves and Moyle, who is temporarily absent, the team was the same as last year, but the forward arrangement has been slightly altered, Davies changing from outside right to centre forward, and Wells going out to the right. This formation seems to offer great things, for the great feature of the game was the excellent combination of the forward line as a whole, Ticehurst and Davies being at the top of their form, but the latter must not get into the way of boring to the left. Wells was quite good and at times brilliant at outside right, but is still inclined a little to "turn" on the ball. Morres at outside left was rather starved, but did what he had to do well.

Leckie was quite as good as ever at centre half, and passed with great judgment, and if possible better than last year. Thomson at right half ought to prove a great acquisition. He is quick and safe, and marks his man well, but must learn to pass with rather more judgment and accuracy. He frequently centred admirably, but did not always find his wing forwards when in our half of the ground.

Of the backs Archer was the better, and has moderated the strength of his hitting to the great advantage of his forwards. He might do well to find his wing man more frequently. Knight being out of practice was scarcely so quick or so safe as usual, but there is time for him and the whole team to put on a good deal of polish. W. T. Clarke in goal did the little that was required of him well, and later in the game put in some very useful work at inside left. Goals were scored by Ticehurst, Davies, Wells and Dryland.

In the semi-final we meet the winners of St. Thomas and St. Bart's., who have already played to a draw of one goal all, on one occasion. There ought to be a very good fight for victory in the semi-final, and in the light of this match we should have a good chance, but a great deal of hard practice and genuine steady training is absolutely necessary, and it is quite time this was commenced in earnest.

United Hospitals Hare and Hounds.

INTER-HOSPITAL CROSS-COUNTRY CHALLENGE CUP.

The race for the above Cup was decided over the Blackheath Harriers' 10-miles course, at Blackheath, on February 10th, and resulted as follows :—

1. St. Bart.'s.—C. R. Woodruff, 2; A. L. Candler, 4; H. W. M. May, 5 = 11 points.

2. London.—R. McC. Linnell, 3; R. T. Brotchie, 9; J. W. Linnell, 10 = 22 points.

3. Guy's.—W. H. Watson, 8; H. Stott, 13; M. T. Marks, 15 = 36 points.

4. St. Thomas's.—Did not count in.

The medals for the scratch race were won by G. C. Birt (St. Thomas's), 64 min. 10 sec., 1; C. R. Woodruff (St. Bart.'s), 65 min. 53 sec., 2; and for the handicap by C. R. Woodruff (St. Bart.'s), 1; A. R. Snowdon (St. Bart.'s), 2. This and last year's president of the U.H.H.H. refereed, and very kindly again presented medals to the scoring men of the winning team. Mr. T. E. Fowler-Dixon, of the London Athletic Club, acted as timekeeper, whilst Messrs. T. E. A. Carr (U.H.H.H.), P, Openshaw (B.H.), and E. Williams (B.H.) laid the trail.

Births.

HODGSON.—On February 3rd, at the Crescent, Salford, Lancs., the wife of Stanley Hodgson, M.D., B.S. Lond., M.R.C.S., of a son.

MUNRO—On February 7th, at 56, Acre Lane, S.W., to Louise M. E. Munro and Donald J. Munro, M.B., B.S. Lond., a son.

Marriage.

TAYLOR—CLARKE TIMPERLEY.—On February 14th, at the parish church, Wimbledon, by the Rev. I. R. Timperley, M.A., Vicar of Wimbledon, James George Taylor, M.A., M.D. Cantab., M.R.C.P. Lond., son of James Taylor, F.R.C.S., of Chester, to Augusta Mary Clarke Timperley, daughter of the late Thomas Clarke, Esq., of Cogshall Hall, Cheshire.

Death.

DURHAM.—On February 14th, at 20, Ellerdale Road, N.W., Mary Durham, widow of the late Arthur E. Durham, F.R.C.S., Consulting Surgeon to Guy's Hospital.

ED.—H. C. C.

GUY'S HOSPITAL GAZETTE.

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Passim.

THE final for the Inter-Hospital Cup has ended in a victory for London. The Cup thus disappears from the smoking-room, though its disappearance, let us trust, is only temporary. From all accounts our opponents thoroughly deserved their triumph, and Guy's has so often been victors in the final that we can sympathise with that excess of elation on the part of the London men which seems to have astonished even the *Daily Mail* reporter. The result of the match was not altogether a surprise, and, however regrettable it may be from our point of view, it will serve to stimulate the team to better efforts when the next final is to be played. While tendering our congratulations to London for a well-deserved win, we therefore couple them with an expression of sincere hopefulness that the Cup may only have a year's residence in the Whitechapel rooms, and be back on its ledge in the smoking-room next spring. A grain of comfort is still left us in the win of the first soccer over London in the semi-final on Thursday.

THE proposed performance of "The Prisoner of Zenda" having had to be abandoned owing to the difficulty of getting a suitable theatre, the hospital is to have the valuable assistance of an amateur company in another way. A dramatic performance will take place in the St. George's Hall, Langham Place, W., on Wednesday, April 11th, at 8 p.m., in aid of the Million Shilling Fund. An attractive programme, which includes Mr. Seymour Hicks' "New Sub.," Mr. Wood's "In the Eyes of the World," and a hitherto unpublished play by Mr. Gordon Evans, entitled "The Tryst," has been arranged, and a large number of talented ladies and gentlemen have promised their services. The Hall of Mystery, as it is styled on some placards, is not over large, and already half the seats have been provisionally booked for the performance. Guy's men who are desirous of attending should therefore lose no time in getting tickets, which may be obtained from Mr. Louisson, or at the booking office at the hall, at the usual prices.

TO-NIGHT, at 8 o'clock, Dr. Newton Pitt takes the chair at the last meeting of the Pupils' Physical Society during the present session. The subject for discussion will, of course, be the successful essay for the Treasurer's Prize, which is devoted to "The Prognostic Significance of Purpura in Children," and it is to be hoped that there will be a large attendance of members. Amongst the Junior men there appears to exist some doubt as to their right of attending the Society's meetings. As a matter of fact, every student is a member of the Society and entitled to attend and take part in the discussions.

The excellent exhibition which Mr. Minett organised in the Pavy Gymnasium on the 23rd ult. reflects the greatest credit on all who took part in it, and the large attendance at the display showed that we are not quite uninterested in such matters. It is a pity, however, that a more active interest is not manifested by students in the Gymnasium classes. This year's competition had to be abandoned owing to the paucity of entries, and practically speaking the weekly classes are attended by a few enthusiasts only. On the other hand, an exhibition display is usually well patronised. However useful and instructive the latter may be, it cannot compare in value with the instruction to be gained from actual participation in competitions wherein each man's points, good or bad, are brought out, and he is fitted to meet an opponent in open competition with some experience of "going for all he is worth." Considering that the Gymnasium instruction, through Dr. Pavy's continued generosity, is free, it is surprising that so little advantage is taken of the opportunities for acquiring a working knowledge of the art of self-defence. At the London Hospital it seems that men have to pay themselves for whatever gymnastic instruction they get, and according to the latest reports they are there working in deadly earnest for the Inter-Hospital Competition.

We are happy to be able to state that the recently-issued appeal by the Committee of the Clubs' Union for funds to pay off the old debt has resulted in a sum of £150 being raised. The Governors have responded to the appeal by subscribing £62 1s., the members of the Hospital and Medical School Staff have added £72 4s., and students, past and present, have contributed their mites, making up the above-named total. The debt to be wiped off is, however, £320, and the appeal, therefore, still holds.

Last week we drew attention in Passim to the quality of the ward Lysol. This week a correspondent points out a drawback to the absolute comfort which should be obtainable in a club, in the shape of the lavatory towels during the lunch hour. It is a complaint which most of us, from personal experience, will fully endorse. According to a dictionary definition, a towel is a "clean cloth on which to dry oneself after washing," and although there may be a reasonable difference of opinion as to whether cleanliness is absolutely indispensable in such necessary toilet adjuncts, there can be none as to the undesirability of, and inconvenience in, attempting to dry oneself on a calico sodden with wash-water. Not only the smoking, but the dining-room lavatory towels as well, are sometimes in such a state that it demands a great deal of courage, and an utter absence of the sense of humour on the part of a member, to ask a visiting friend to use them. It is a matter which might very well be attended to.

We have received a circular giving details of the proposed students' excursion to France organised by the "Excursions Medicales Internationales" Committee. This institution, which organises annual trips for medical students in France, has arranged a most excellent programme for an excursion of English medical students. It would take up too much space to give the programme *in extenso*, but it may be said that the excursionists will leave London on April 18th and return home on April 28th. During the ten days period they will visit Calais, Lille, Paris, Angers, Nantes, Rennes, St. Malo, Caen (where quite a colony of English students exists), Rouen, and Havre, and will be shown over all the hospitals and clinics. As the Committee, after apologising for "the bad English language of this circular" puts it: "The English medical students are expected in Paris and other towns by their 'French fellows,' who are getting ready to fraternize with them and invite them to a reception at the Club House on the evening of their arrival in Paris. Everywhere, the English party will be friendly received, and they will be shown everything that may extend their intellectual knowledge." Minor relaxations, such as dinners, receptions by the Town Councils, sight-seeing, and theatres, will also be provided, but it is improbable that a formal visit to the Paris municipal markets will be included in the programme. The total charge for the excursion ticket is £11 (275 francs) which includes all expenses. Full information and

circulars may be obtained from the Dean of the Medical School, or direct from the Society's Administrateur-Fondateur, M. Etienne Bazot, 184, Rue de Rivoli, Paris (1er).

The January Pass List of the Intermediate Examination in Medicine of the University of London is pleasant reading for Guy's men. Both students and teachers may be gratified by the part they are taking in maintaining the Faculty of Medicine in the University. Out of 47 men who succeeded in passing this Examination after studying in one of the 10 Schools of Medicine of the University, 17 were Guy's men. That more than a third of the successful internal male students should hail from Guy's, is an indication that the course of instruction here is either very attractive to the student or very suitable to his needs. As a matter of fact, we believe it is both. We have no means of comparing our percentage of successes with that of other schools who passed one or two candidates, or even seven, as our next competitor managed to do. But we are all in favour of large classes. believing that the enthusiasm thereby engendered in both student and teacher far outweighs the supposed advantages of individual attention which figures so largely in the prospectus of the private coach.

Dr. Alfred Salter, who was House-Physician to Dr. Hale White in 1896, and Gull Research Scholar from 1897–1900, has been elected unopposed to represent Bermondsey on the London County Council. He takes the place of another old Guy's man, Dr. Geo. Cooper, who has sat on the L.C.C. continuously for seventeen years, and who was returned to Parliament in January by a majority of over 1,700. Dr. Salter has been a member of the Bermondsey Borough Council for the last three years, and has occupied the position of Chairman of the General Purposes Committee of the Council for two years in succession, as well as Chairman of the Works and Valuation Committees.

Dr. Ainley Walker, M.D., M.R.C.P., late Boycott lecturer, has been re-elected to the Gillson Scholarship in Pathology of the Society of Apothecaries.

There are importan changes pending in the Hospital Staff, but all attempts to win official information from the authorities have been unsuccessful, and we are therefore debarred from taking any notice of the rumours in circulation. We are free, however, to offer our congratulations to Mr. T. Hicks, who has just been appointed Surgeon to the Samaritan Free Hospital for Women—even though we are not supposed to be officially cognisant of his appointment.

It is not often that dressers are called upon to attend what Florence Nightingale called "the most grateful-minded patients one can hope to have"—dogs, and there was an almost visible wave of excitement in the Front on Wednesday last, when a nice-looking Irish terrier was brought in with the canine equivalent of a Pott, demanding attention. Mr. Lane's services not being available, and there being also some doubt as to the advisability of taking in the little patient, it was decided to put up the injured limb in plaster, and send the case home. The operation of encasing the broken leg was performed under an anæsthetic, and afterwards the patient was laid on a mat in front of the Astley-Cooper fire, where he licked the plaster in a perfectly contented manner. It would be interesting to find out how many animals are annually treated in the Out-patients' and front surgeries of London hospitals, and although statistics are not available, one may take it for granted that whenever such patients are brought up for treatment, they receive as much care and attention as their human fellow sufferers.

Mr. O. V. Payne has had the misfortune of making a personal acquaintance with the minor signs and symptoms of diphtheria, and during the past week has been assiduously studying the view from the window of Isolation. If the reports about the circulation of certain papers are true, he must by this time be the best-known Guy's man, for at least two widely-read dailies kept their readers informed of his progress. We are glad to state that he is now so far recovered that the *Star* has ceased to treat him as a distinguished public character.

A Diagnostic Error.

CLINICAL LECTURE BY Mr. SYMONDS.

February, 1906.

Gentlemen,—A man, aged sixty-eight, spare and intelligent, and looking ill, was admitted with constant abdominal uneasiness, and occasional pains of a griping character. Locally, he pointed to the left groin as the seat of distress, and here there was a small elongated fluctuating swelling. It was not painful, emptied to some extent on pressure, and reached to the external ring. The skin was marked by the pressure of a truss, which had been worn for many years for the relief of a hernia. This fact of a hernia, then, on the left side—the side to which he pointed as the site of pain—concentrated the attention, and the case was looked upon as one of strangulated hernia that had gone back before admission.

You will some of you remember that he was examined by the class on a Friday in January, and his case discussed somewhat freely. My duty to-day is to tell you that the diagnosis arrived at was wrong, save in one particular; to point out where we went astray; and to record the distressing fact of the patient's death. This termination must, to some extent, be set down to the forty-eight hours' delay in operating.

To return to the symptoms shown by this patient. The swelling was not reducible, gave no gurgling, and was, there could be little doubt, connected with a hernial sac. The abdomen was full in its lower half, and from time to time, when he had pain, there could be seen to rise above the situation of the internal ring a localised fulness, such as might be caused from an obstructed coil of intestine. This was especially marked after handling. The upper part was easily manipulated, and the examination was not painful. The bowels had never been obstructed, and throughout his illness vomiting was never a prominent symptom. The pulse was particularly small (counted 112) and suggested an enfeebled heart; the tongue was dry and cracked, and of this he complained that it prevented swallowing. He had not been able to take his food for some days, and on admission—three hours before we examined him—disliked even milk. The condition of the tongue suggested pyrexia, but the temperature was normal; it was also suggested that it might be due to an open mouth. Another suggestion was, that it might have been caused by the administration of belladonna. One other cause I suggested, and that was septic absorption without pyrexia. But here I must acknowledge that I did not press this point so far as I might have done; otherwise we might have arrived at a more accurate diagnosis.

The history was of some six days' illness; it was indefinite, centred mainly round the fact of a hernia, and we attempted to read his case from this basis. The absence of complete obstruction, and the rising of the coil on manipulation, together with the colicy pain, suggested a partial *hernia*—that form known as Richter's, where a part only of the wall lies in the sac, forming a diverticulum from the gut. That seemed a fair explanation for some of the symptoms, but did not throw light on the pulse, the tongue, and the general illness. On this explanation, the fluid in the hernial sac was considered to be a serous exudate from the bowel. The man's general condition suggested to me the existence of pus and septic absorption, and the question of a gangrenous omentum arose. On this explanation, the fluid in the sac would be pus. It was pointed out that such a condition may, and frequently does, exist without pyrexia.

On the whole, then, we concluded that whatever was the matter, the condition in some way was due to a hernia, and that an operation was required. The full gravity of the man's condition was, I fear, not recognised, otherwise he would have been operated upon at once. Having but just been admitted I left him, with instructions that if any symptoms arose, pointing to obstruction, or any unfavourable change occurred, operation should at once be undertaken. No change in the man's condition took place; he remained in the same feeble state, the pulse small and quickened, the temperature low, and the tongue continued to be dry. He did not rest well on this Friday night, and took

little nourishment. I had arranged to operate upon this patient on Saturday in any case, but unfortunately was called to an urgent case, therefore I telephoned directions that the operation was to be carried out if the patient showed any signs of advancing illness, locally or generally.

Gentlemen, let me impress this great *clinical* lesson upon you, viz., that *the persistence of symptoms is as important a sign of advancing disease as the development of fresh ones.* This man was no better; the pulse, the low temperature, the dry tongue, the abdominal uneasiness and the general illness continued. This was enough. In acute abdominal disease, I constantly use this argument as an indication for immediate operation. For example, in a case that occurred less than a week ago of acute appendicitis, the persistence of abdominal distension, a rapid pulse, flushed face, a dirty tongue, and local pain at the end of about sixty hours, were urged as indications for operation, in the face of cessation of vomiting, a normal temperature, and easy action of the bowels. A condition that must have proved fatal was found and relieved. In this connection let me call your attention to Chart 1. This patient, a woman of fifty, was taken ill with acute appendicitis, and when seen forty-four hours after the onset expressed herself quite well in a general sense. The leading fact was the continued pyrexia. The collapse, with fall of temperature, must be looked upon as an additional sign of advancing disease. So well was the patient that she was surprised at our wishing to operate. The persistence of pyrexia and of a local swelling was urged. A gangrenous appendix was removed, an abscess of considerable size evacuated, and quick recovery followed.

On Sunday morning, when taken into the theatre, our patient was apparently no worse, except that two days nearly had elapsed since admission, and that for so long his malady had been progressing. Recognising the gravity of the man's condition, the anæsthetist was warned and asked to put him under very lightly. The cause of the cardiac depression and general "low" state, and the continued dry tongue, there could be no doubt, was due to the presence of pus and absorption without pyrexia. The thick foul pus that was evacuated suggested that the bowel had been ulcerated before reduction, and had perforated, leading to the formation of a localised abscess. The pus, however, was thicker than that seen in such conditions. The finger passed easily through the ring into the fossa, without encountering intestine or omentum. This suggested an appendicular origin. This was confirmed, by tracing the pus into the pelvis, and further confirmed by the presence of a swelling in the right iliac fossa. The septic process arising in the appendix, had first led to serous exudation in the pelvis, then suppuration with extension upwards into the left iliac fossa, and then the descent of pus into the hernial sac. *The hernia was innocent of the whole transaction.*

The very important question now arose, as to what limits should be set to the extent of the operation—to be content with the incision already made, gently flushing out the pus, and inserting a drain, and so completing the operation in fifteen minutes; or to be more logical, evacute the pus by enlarging the incision, cleaning by dry mopping and flushing, and further to open and drain the appendicular collection.

The first method, in severe cases of a week's duration, will often be attended with success, where larger measures will fail. The general condition will at once improve, and strength will be given for further operation. It is, moreover, a method supported by the known successful termination of many cases. The abscess bursts into the cæcum, and into the rectum, or occasionally through the skin, and immediate recovery ensues. We may do too much, and determine a fatal issue, first by diffusing the poison of the bacillus coli; and secondly, by exhausting the strength of the patient, partly by the manipulation and partly by the anæsthetic. The depression and the vomiting following the anæsthetic are very important factors indeed in contributing to a fatal issue. It is wiser in some advanced cases, like the present, to operate with local anæsthesia. Let me illustrate this by a notable instance in my practice. A little boy had been ill several days, and when seen was vomiting

incessantly. There was a large pelvic collection bulging into the rectum. His father, himself a well-known surgeon and operator, agreed that in such cases, in children, an abdominal operation was generally fatal, and that simple evacuation was sufficient. It took ten minutes to open this collection by the rectum, some two ounces of pus were evacuated from a large swelling, probably much less than the whole. Exploration with the finger was not employed, nor was any attempt at flushing practised. We simply copied the natural method of relief, and with complete success.

Such an operation, then, might have been made in this case, and was carefully considered. The condition of the man was examined, he was found to be taking the anæsthetic well, his lips were of good colour; being lightly under, his labial muscles were pursed, his conjunctiva sensitive, and his pulse as well as when we started. Moreover, he was a man, and though sixty-eight, of a wiry build. Had he been a child, I would have been content with a simple evacuation, in the presence of such extensive suppuration. Age in such an operation is of the greatest importance in the later stages of this malady. I decided that a freer evacuation could be borne. In enlarging the incision the epigastric artery was divided. This was expected, and preparations made for securing it, but unfortunately more time was occupied over this than expected, and some blood was lost. The pelvis and iliac fossa were cleaned with sterilised pads. Then an incision was made in the right side, and a moderate-sized abscess opened. Drains were inserted, and having borne the operation, as far as could be judged, fairly well, with the aid of strychnine and ether, and subcutaneous infusion of saline, he was sent to bed. There was still the depression of post-anæsthetic vomiting to be met. In this feeble cardiac state, especially in a man of sixty-eight, though wiry and active, the depressant effect of an anæsthetic is no mean danger. And the time of greatest anxiety occurs in the first few hours after operation. The very important question is raised, as to the wisdom of injecting strychnine and of infusing during the actual operation. These stimulants give a fallacious view as to the cardiac power, and the operator is inclined to prolong an operation unwisely. When the post-operative depression follows, the collapse is apt to be greater, and to be less relieved by these same stimulants. I hold it to be wiser to administer chloroform and to avoid all stimulant, so that the surgeon, always responsible for the whole conduct of the case, may be able to form an accurate judgment as to what he may or may not do. For some hours after the operation the man did well. The pulse did not rise in frequency, though it remained feeble. He talked to his wife, took some nourishment, and in the afternoon was considered by the Sister—no mean judge of such a condition—to be doing well. Somewhat suddenly, near 6 p.m., he showed marked pallor and collapse, and within a few minutes expired. Death, there could be little doubt, was due to cardiac failure, brought about primarily by the slow septic absorption, and intensified by the operation. The end was not so sudden as to prevent remedies being applied, for strychnine was injected, and he was also infused with saline.

Looking back over this case I cannot but conclude that a different termination might have been brought about. Let us look to the errors in the conduct of the case, and learn the lessons they teach, for this is one of the types of appendicular suppuration, and one that will occur again and again. It may be your lot to handle such a condition, and the lesson will sink deeper, if taken from the error, than the success of others. For by our mistakes we learn, as well as by our successes. I thought it was Russell Lowell who said that "a man who makes no mistakes makes nothing," but my friend Colonel Elcum, who has done me the honour of being present to-day, attributes the axiom to Napoleon. In war, there can be no greater truth, for here a man who has suffered the defeat of his scheme, should thereby be the better leader, if he learns his lesson, and if he cannot, then he no longer should lead. And our work in battling with disease requires very often the finest calculations, the nicest judgment, and the promptest action.

The first point that led to delay was history. Called to the bedside of a case of hernia, the mind centred round this fact, and in investigating the condition it constantly limited the horizon. It is the part of a chief to be able to dismiss information brought to him as of no importance; to recognise what is *propter hoc* and what is *post hoc;* to keep his mind open and guide the less experienced. All of you in your several ways have to do this, and we make it part of your training to help you to develop this power. A ward clerk in taking a history must not accept the conclusion arrived at by the patient that the injury determined the malady. There may be an interval of a week, or a month or more, between the two events. In my clinical teaching you will recall that a favourite axiom I am always inculcating is to detach your mind from the apparent sequence of events and view the case apart from the history—in other words, to make a flank attack. It was the frontal advance which in this case led us into the ambush. Let that be the first lesson. The responsibility of this initial error was mine, for it was my duty as chief to estimate the value of the information and direct the investigation of the case on this particular Friday afternoon. It was a busy afternoon, and the class was large, and teaching at the moment the main occupation. There was not, as there had been on many occasions, a helpful suggestion from a member of the class to throw light on the case, and guide the march. Instructions were left that if any change took place in this man, locally or generally, the operation was to carried out at once. It might be that he had come in just after the successful reduction of the hernia. He was left for the moment as the anxious case of the "take-in." I arranged to operate the next afternoon if he remained in the same condition. Finding myself unable to go, directions were sent down to operate at once if any new symptoms had arisen. The report received stated that the man was about the same, had not required any sedative, and had not been sick.

Let me next call attention to the general condition of this patient. The pulse was 112, the temperature 97°, the tongue dry, and he looked thin and ill. These symptoms persisted, and the proper direction to have sent down would have been to operate, if there was no improvement. I have referred to the great importance of this point earlier, but let me here again enforce the lesson, that persistence of symptoms indicates progress. There were signs of septic absorption, and indications as to the locality of the pus.

The next point to notice is the absence of pyrexia. We had no record of the early days of this man's illness, but there can be little doubt that the temperature was raised at this time. It is well-known that in peritoneal suppuration, and in cases of strangulated hernia with peritonitis, the temperature as a rule is low—even, as in this case, below normal. Chart 2 shows a high temperature in the early days of acute appendicitis, falling on the fifth day to normal and remaining low. When this patient was seen on the eighth day the pulse was 64 and the temperature normal. He, however, showed in his flushed face, and dry and dirty tongue, the other signs of septic absorption. An abscess of unusual size was opened through the right loin and a rapid recovery ensued. I want you particularly to notice the *general condition* which accompanies septic absorption—a condition, as I have mentioned, which was present in the case which forms the text for this lecture, as well as in the one I have just mentioned.

To further illustrate the fall of temperature in the presence of advancing suppuration, take the next Chart (3). The patient in this instance, a girl of ten, was found by her mother to be a little out of sorts, and her temperature to be 103°. As the child was subject to disturbances of this kind, little notice was taken of it, and the next morning the temperature was 100°, but rose again to 102°, when the medical attendant was sent for. There was no evidence then of any localised appendicitis, but only some general abdominal pain; it was not until the next day that tenderness was noticed. When asked to see this patient on the fifth day, the fact of a continuously high temperature, and of an increasing swelling, led me to decide upon the

wisdom of operation. On arriving on the morning of the sixth day the child had a normal temperature and pulse, she had slept through the night without any sedative, and was in all respects better. Notwithstanding the improvement the operation was carried out. A large foul abscess was evacuated, a gangrenous appendix was removed, and the child got well. This case illustrates the steady progress of disease in the presence of an improved temperature and pulse. I think had one been heckled by this child's parents, the operation might have been postponed.

A more striking instance was that of a boy already referred to, whom I was called to see but a few days ago. The temperature had been as high as 103°, but had fallen to normal. The pulse, however, was rapid at 120. He had the typical flushed face that goes with septic absorption; he had a dirty tongue and local abdominal tenderness. Though but sixty hours had elapsed since the onset, a large gangrenous abscess was found with much pus in the pelvis. With all this rapid extension of disease there was no temperature. Though the condition was one of great danger, the boy has done well—a result that can only be attributed to the early operation.

What does this rise of temperature in the early stage, and its fall in the later days of this acute disease, signify? It means that at first there is a septic process in the connective tissue of the appendix. While this is in progress there is pyrexia, but when it ceases the fever disappears, although the suppuration extends in the peritoneum. The duration of the feverish stage will depend upon the rapidity and the extent of the gangrenous process in the appendix, and it will therefore in some be of short duration, and in others may last a week. You will notice that in some of these cases the pulse is rapid, but in others it is slow. Let me refer you to another Chart (4). It was that taken from the case of a lady who had, you will notice, a raised temperature for six days. It then fell to normal, and remained so for five days. On the fourteenth day of her illness I found a large abscess, and on opening it there escaped, besides a concretion, a long tubular slough, representing apparently the whole appendix. The explanation of this temperature is, that during the septic process in the wall of the appendix the temperature was raised; that it then fell and remained normal; and yet, during the next five days, there was a steady increase in the amount of pus. The lymph, thrown out by the peritoneum, prevents the absorption of the pyo-genetic organisms.

The septic intensity of the pus in appendicitis varies considerably, and the general condition of the patient will depend very much upon the severity of the poison. Therefore in some we find a low temperature associated with a slow pulse; in others there will be a rapid pulse associated with a low temperature, and, in these, the signs of general septic absorption will be very much more marked.

An extreme instance of mild infection is the case of a woman now in Lydia, sent in for a large, hard, fixed swelling in the lumbo-iliac region. It was thought to be renal in origin, but the fixity pointed to a sarcoma in the post-peritoneal tissue, or to a hard inflammatory mass due to appendicitis. She looked in perfect health, had a good colour, a slow pulse, a normal temperature, and a fair appetite. The mass was painless to handling, and repeated examination could not discover the colon. The only point to note as an indication of some very mild septic condition was the tongue. This was a little dry and smooth. Some of you will remember seeing this case on a Friday, when I called attention to this one sign. The woman was forty-two, and though laid up six weeks had never been ill. On incising the swelling an enormous collection of pus was evacuated. It was not foul, certainly did not come from the kidney, but had the character of pus arising from a mildly septic condition of the appendix.

One might also refer to patients who walk into the hospital with an appendicular abscess, and have not been laid up at all. You gather from this, the thickness of the protecting layer of peritoneal effusion. But even when free in the peritoneum, there may be no temperature, and little general illness. I recall a man who walked into the hospital, and dying next day, the abdomen was found full of pus. Yet

he had given evidence in a court of law the day before.

Another point of importance in the patient, is the presence of pus in a hernial sac on the left side. Had this swelling been on the right, its dependence upon suppuration about the appendix would have been inferred almost at once. I have seen pus, in a femoral hernial sac, due to this cause, and a gangrenous appendix in an inguinal sac in a man. In a young woman I found the appendix in the inguinal canal perforated by a pin. In children it is not uncommon to find the appendix in a hernial sac with the cæcum, and we must expect to see suppuration in a sac on the right side, with appendicitis, but it must be rare indeed to find, as in the present case, the pus in a left hernial sac.

Let me summarise the lessons to be learnt from this case, and the manner in which it was conducted. And first, the misleading history was relied upon, and kept the inquiry too rigidly directed to a hernial explanation. Next, the importance of looking at a case altogether apart from the history, and estimating the condition from observation alone. Recognising the case to be unusual and somewhat obscure, the delay in operating was most unfortunate. I would impress the importance of the recognition of septic absorption in the absence of pyrexia, and call your special attention to the value of the condition of the tongue. The proper directions to have left for the conduct of the case were, that if the condition did not improve, operation should at once be undertaken. The loss of forty-eight hours went far in determining the fatal issue. The persistence of symptoms is as important as the development of new ones. The absence of pyrexia and the presence of advancing suppuration in the peritoneum, whether localised as in this case, or diffused as in the boy referred to, are to be remembered. Again, the danger of prolonged operation in advanced cases, with feeble cardiac action, is to be remembered. The simplest possible evacuation of the pus—even under local anæsthesia—may secure a good result, where a freer handling may prove fatal.

Thus, bearing in mind all the features of this unfortunate case, I come to the conclusion that if the hernial sac had been simply incised and drained soon after admission, or even on the Sunday, and under local anæsthesia, a different result might have been recorded.

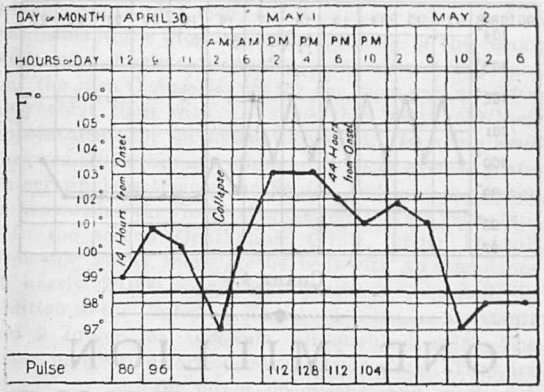
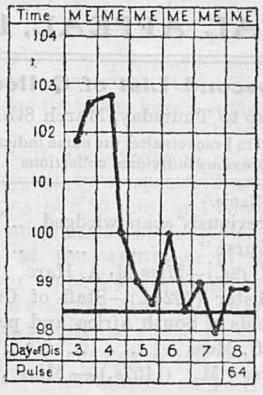


Chart 1.



Chart

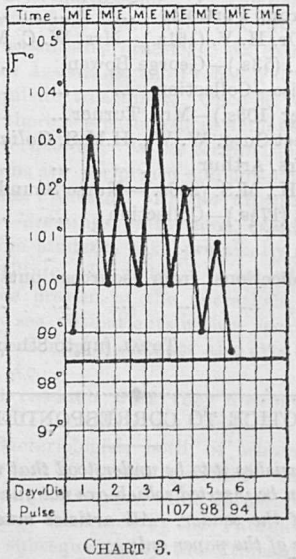


Chart 3.

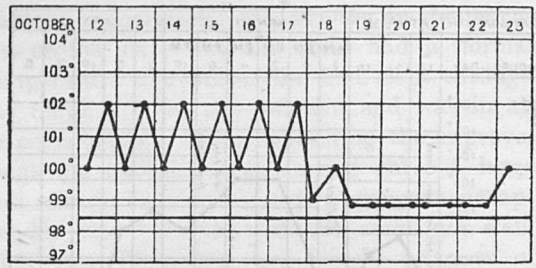


Chart 4.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-second List of Collections.

(Received up to Thursday, March 8th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections.

Name.	Shillings.
Amount previously acknowledged ...	69,910½
"An old Guy's Nurse"	7
Allen, Miss M. C. (8s.)—Miss M. A. Hare ...	20
Astley-Cooper, Sister (202½s.)—Staff of Consolidated Gold Fields of South Africa and personal friends of Mr. C. Moss	98
Edgecumbe, Miss M. (1457s.)—Miss Edith Williams	17
Esther, Sister (39½s.)—F. Menzies	63
Henderson, H. J. (186½s.)—Profits on sale of Nigger Group Portraits	93
Hickman, Dr. H. V. (161s.)—Mrs. W. C. May ...	5
Leeming, A. (53s.)—George Bowen	2
Lulham, Miss—Collection	20
Lydia, Sister (103s.)—Mrs. Turner...	5
Probyn, Fleet Surg. W. W., H.M.S. *Goliath* ...	20
Steward, Mrs. Arthur	5
Targett, J. H., M.S. (203s.)—Nurse Saunders ...	15
Yates, Miss (17½s.)—Collection	6
	70,286½
Further collections from sources outside the Hospital	95½
Total (up to 8th inst.)	70,382

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Correspondence.

To the Editor of Guy's Hospital Gazette.

A Complaint.

Sir,—May I through your columns call attention to the inadequate supply of towels in the lavatory during lunch time, which has been a disgrace to the Club for many years.

Surely some means might be found to renew the supply about 1 p.m. when all the towels are both very wet and dirty? As matters are at present a member is ashamed to bring a friend to the Club at this hour.—Yours, etc.

March 7th, 1906. J. S. FARNFIELD.

Pupils' Physical Society.

The 10th meeting of the Session was held in the Wills Library on Saturday, February 24th, 1906, at 8 p.m. Mr. F. W. Morton Palmer was the President in the chair. It was a Clinical evening, and the following cases were shown:—

1. A case of spina bifida (meningomyelocele) with hydrocephalus, in an infant 4 days old.
By Mr. C. H. Rippmann.

2. A case of infantile diplegia in a child 3 years old. The condition had been first detected at 9 months. There was much discussion as to the nature of the condition, and whether it was ante- or post-natal.
By Mr. R. O. Williams.

3. A case of myasthenia gravis in a young woman. The eye muscles, and those of swallowing, were the most severely affected. By Mr. T. Evans.

4. A case of myasthenia gravis in an elderly man. The lower jaw muscles, those of the right eye, and of the neck and legs, were the most severely affected.
By Mr. R. O. Williams.

5. A case of splenomedullary leuchæmia in a woman. The condition had been greatly alleviated by X-ray treatment. By Mr. T. Evans.

6. A case of pemphigus of the conjunctivæ in a youth, who had had recurrent attacks for years, and now showed extreme contraction and scarring of the conjunctiva of both eyes. He could still see.
By Mr. F. W. Morton Palmer.

There were active discussions, in which Messrs. Rippmann, Williams, Evans, F. W. Morton Palmer, Hinde, Payne, Berry, Allison, May, Digby, and the two secretaries joined. Altogether twenty-three members were present. The President announced that the Treasurer's Prize Essay must be sent in not later than March 1st, and the meeting adjourned to coffee at 9.50 p.m.

The General Hospital of Vienna.

The General Hospital, the "*Allgemeines Krankenhaus Josephinum*," containing over 3,000 beds and probably one of the largest in Europe, was built by the Emperor Joseph II. in 1784, and is now supported and controlled by the Government. It is conveniently situated in the Alserstrasse, one of the principal streets in the centre of the town, and in its close proximity are the University, the Chemical Laboratories, the Anatomical Institute and the Josephinum, founded by the Emperor for the education of military surgeons. The last contains an excellent pathological museum. Within a few minutes' walk of the Hospital are the Emperor's Palace, the Houses of Parliament and the Town Hall.

The Hospital buildings have remained practically unaltered since their erection, and are very old-fashioned and hardly up to the standard of modern hygienic requirements. The wards much resemble the old surgical wards of Guy's before they underwent their recent renovation, and, in proportion to their size, accommodate a far greater number of patients.

A new hospital is at present in course of construction on a site close by, which is to be the embodiment of all modern ideas. It is being built especially with a view to educational purposes, and will be a sort of combination of our Out-Patients with Clinical.

All out-patients will be seen there and cases of interest kept in the Hospital, whilst those demanding admission, but unsuitable for research work or teaching purposes, will be sent to a large annexe now building on the outskirts of the town. This arrangement will no doubt be excellent for the students, but from the patients' point of view it might possibly be preferable to be classed as an uninteresting case.

The present buildings, which are nowhere more than two storeys in height, cover an enormous area of ground and are arranged in a regular maze of courts consisting of a large front quadrangle more than 200 yards square, and eight smaller courts. The localization of the different departments is greatly facilitated by an arrangement which we might be wise to adopt, and so escape the unending questions in the Colonnade on visiting days. Each department has its distinctive colour, the route to it being marked with frequent coloured arrows in conspicuous positions, a plan of the Hospital with a key to the colours being hung in the front entrance. Each department is subdivided into clinics, in all of which out-patients are seen daily, Sundays included. At the head of each clinic is the Professor, who is appointed by the Emperor and receives a salary from the Government. Under the Professor are the Assistants, who are also salaried Government officials residing in the Hospital. They are appointed on the recommendation of the Professor, in whose hands their dismissal also lies. Under the Assistants are the Aspirants or Junior Assistants, all of whom are qualified men, but receive no salary and do not reside in the Hospital. The position of the Senior Assistants closely corresponds to that of our Residents, but the men themselves are for the most part considerably older than with us, since they may hold their appointments for an indefinite period. In many cases they remain in the same clinic for 5, 10, or even 15 years. In certain departments the Senior Assistant is allowed to live outside the Hospital and to see private patients.

In the second Ophthalmic Clinic, under Hofrath Professor Fuchs, there are 94 beds with an attendance of nearly 25,000 new cases yearly. The staff, in addition to the Professor, consists of 3 Senior Assistants and 9 Juniors or Aspirants, all qualified men. The latter in position correspond to our dressers. They are allowed to perform minor operations, and work out refractions under the supervision of their seniors. Their duties also include writing reports of the cases, which they do at the dictation of the seniors, each of the latter having a ward of 30 beds under his care and that of his three attached Juniors. Foreigners studying in the Clinic may become Aspirants at the discretion of the Professor, provided that they have a sufficient knowledge of German.

Out-patients, with the exception of refraction cases, are seen and treated by a special out-patient officer, whose work begins at 8.30 a.m. and continues into the afternoon. The routine work of the Hospital commences with the visits of the Assistants to the Wards at 8.30 a.m., an hour which I doubt would be popular with the Guy's Residents. At 9.30 the Professor arrives, rapidly sees the new patients, and also any in-patients of special interest, and then goes round one of the wards. At 10.30 he gives a lecture of an hour and a half's duration, which is part of the University Course and compulsory for all students, who also have to pass a special examination in ophthalmology. The majority of the foreigners studying in the Clinic also attend the lecture, which is essentially practical, six cases being shown by the Junior Assistants, the Professor describing them and the requisite treatment. Once a week, in lieu of the lecture, there is a pathological demonstration, with admirable lantern slides. At the termination of the lecture the operations are performed and out-patients of interest seen by the Professor. In the afternoon the ward work is done—dressings, refractions, examination of patients, &c. The students take practically no part in the work of the Clinic. In addition to attending the lecture they may be present at the operations should they wish, and may see out-patients with a special out-patient officer. The Senior Assistants also give courses in ophthalmoscopy, &c.

In scientific and research work they are here very much ahead of us. To the Clinic are attached a special Pathologist and Bacteriologist, both of whom have previously held the post of Senior Assistant. Cultures are made from every infective case, while all pathological specimens are cut and examined by the Pathologist or the Assistants and subsequently by the Professor, who spends much of his time in the afternoons in giving

pathological instruction to one or other of the Assistants or to certain privileged strangers.

Tuberculin injections are in common use as a diagnostic agent. The Pathologist, Bacteriologist and all the senior Assistants speak English, and, for the benefit of the foreigners attending the Clinic, give numerous courses both in German and in English. The fees for these courses range from 50 to 100 crowns (£2 to £4), and their duration from 20 to 50 hours.

The foreign element includes practically every nationality, from Japanese to South Americans; the English are few—I have met but two during my stay here. The Americans, however, are greatly in evidence; there are, I believe, nearly 150 in Vienna, all of whom belong to an iniquitous brotherhood called "the Vienna American Association," into whose hands the control of the courses has unfortunately fallen to a great extent, and, since the majority of the courses are limited to six or eight men, students of other nationalities are apt to be ousted from certain of the most popular. It is right to say that Englishmen are invited to join the society, but I believe the majority prefer to suffer. The one redeeming feature is that the busy American cannot afford to waste his time in obtaining practical experience in the Clinic but finds more profit in the courses, some of them taking as many as six or eight daily, and so leave the Clinic free for more leisurely individuals.

The opportunities of independent pathological and bacteriological work here are splendid. On the payment of the ridiculously small fee of one crown (10d.) a month one has the right to use either the Pathological or Bacteriological laboratory attached to the Clinic, which fee also includes materials, such as stains, alcohol, &c. I have found everyone from the Professor downwards, most kind and obliging and always ready with assistance or advice.

Among the patients the confusion of languages and nationalities of the polyglot Austro-Hungarian Empire is most amusing; Austrians, Hungarians, Bohemians, Czecks, Moravians, Dalmatians, natives from the Tyrol, Polish Jews, etc., etc., with a leaven in the shape of stray Russians and Greeks. Each nationality has its own picturesque dress and even more picturesque language, giving the whole the appearance of a Savoy opera. The Austrians alone speak German, so the difficulties in finding out the trouble and history can well be imagined. Sach a crowd would, I am sure, upset the mental balance of our luxurious out-patient officer in his snug and airless chamber in less than a week. In spite of these difficulties the patients are very much more easy to deal with than our honest and independent British working man; they readily, one might almost say apathetically, submit to most protracted examinations, and undergo operations with the greatest fortitude, though I fear this quality has its origin rather in stupidity than in courage.

In the Eye Clinic it is quite the exception for an anæsthetic to be administered—I have seen both enucleation and even opening the frontal sinus done under cocaine. In the Aural department I hear the radical operation for mastoid disease is commonly performed under a local anæsthetic. One would think that the gouge and the mallet would, to say the least of it, be somewhat disturbing to the patient's comfort.

Among the Russians quite a number attend with corneal opacities of home manufacture artificially produced during the Russo-Japanese war to prevent them being called on to serve in the East. The favourite agent appears to be nitrate of silver or a leech, the triangular bite of the latter producing a most characteristic scar in the cornea.

Both methods seem equally effectual, as the majority of the experimenters arrive with fine staphylomata and secondary glaucoma, usually necessitating removal of the eye. The nursing arrangements, I might even include the nurses, are most primitive. The Sisters are all religious Sisters, selected probably more for their piety than for their nursing skill, while the nurses, who reside and sleep in a species of loose box in the wards, are mature and portly matrons, and must be very closely related to the historical Mrs. Gamp or our more modern and more meritorious scrubber. There are consequently none, or extremely few, of those pleasing and exciting matrimonial rumours now so prevalent at Guy's, whispers of which reach even Vienna!

The Assistants, I understand, have little to do in the wards in the evenings. In the vicinity of the Hospital are numerous Pensions and rooms, and restaurants are moderately cheap. German is not essential, but some previous knowledge of the language would avoid the waste of much time.

A. R. BRAILEY.

Papers by Guy's Men.

The Operative Treatment of Fractures, introducing some Original Methods of Bone-union by Simple Mechanical Means. By Lieutenant R. Grenville Anderson, R.A.M.C.—*Journal of the Royal Army Medical Corps* for March, 1906.

A Lecture on Transfusion. By A. P. Beddard, M.D., F.R.C.P.—*Clinical Journal*, 7th March, 1906.

Recurrent Herpes Gestationis. By C. A. Douglas Bryan, L.R.C.P. Lond., M.R.C.P.—*The Lancet*, 24th February, 1905.

A Clinical Lecture on Two Cases of Bullet Wound of the Brain. By R. Lawford Knaggs, M.C. Cantab., F.R.C.S.—*Ibid.*, 3rd March, 1906.

An Address on the Borderland of Insanity, By G. H. Savage, M.D., F.R.C.P.—*British Medical Journal*, 3rd March, 1906.

The Hunterian Oration on Recent Surgical Methods in the Treatment of Certain Forms of Paralysis. By A. H. Tubby, M.S., F.R.C.S. Illustrated.—*Ibid.*

Some Remarks on the Prevention of Appendicitis. By W. J. Tyson, M.D., F.R.C.P., F.R.C.S.—*The Journal of Balneology and Climatology*, January, 1906.

A Lecture on a Case of Pernicious Anæmia. By W. Hale White, M.D., F.R.C.P.—*The Clinical Journal*, 28th February, 1906.

Odontomes.

CLINICAL LECTURE BY MR. J. LEWIN PAYNE.

GENTLEMEN,—As students of dental pathology, the subject of odontomes demands our consideration. Although the tumours which are ordinarily described as odontomes rarely come to us for treatment, yet many pathological conditions affecting the teeth can only be properly understood by carefully studying the development of these tooth tumours.

During the last few years I have had the opportunity of investigating and obtaining sections from two specimens of special interest.

The first occurred in the mouth of a boy, aged 14, who came to the out-patient department of this hospital complaining of pain in connection with what he thought was an ordinary tooth. On examining the mouth a small piece of hard calcified tissue, irregular in shape, was found on the left side of the mandible, occupying the position usually taken by the second permanent molar. The surrounding gum showed signs of inflammation, and the body itself was somewhat loose, and pressure upon it caused pain. Its removal was easily effected by means of hawksbill molar forceps. On examining the specimen, which I will now pass round, you will observe that it consists of an irregular mass of calcified material having a slight constriction towards its base. (Fig. 1.)

FIG. 1.—Actual size.

Composite odontome found on the left side of the mandible occupying the position of the second permanent molar.

It measures 15·2 millimetres in the antero-posterior direction, 10 millimetres in the labio-lingual, and 12 millimetres in the vertical. The upper surface is rough, and pitted with depressions which give it a cauliflower-like appearance; the narrow portion, forming its base, is comparatively smooth and was covered by the gum when in the mouth. Its weight is only 21·5 grains, and this is a special point of interest, as an odontome such as this rarely weighs less than 40 grains.

The microscopical section (Figs. 2 & 3) shows alternate layers of enamel and dentine, which run for the most part in a vertical direction; here and there irregular cavities occur, and these are lined with enamel; interglobular spaces and osteo-dentine are also found in the section, but no trace of cementum has been observed.

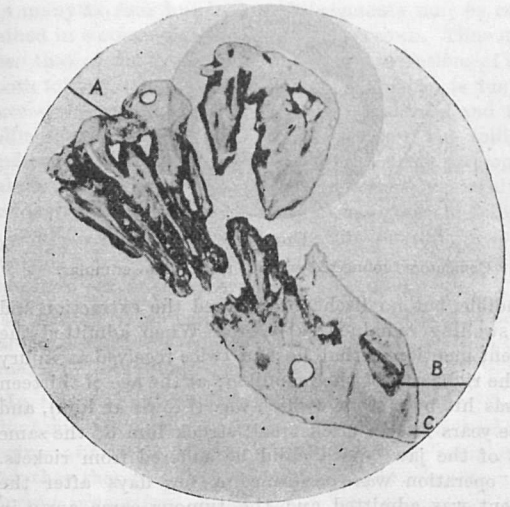


FIG. 2.—A. Osteo-Dentine. B. Enamel. C. Hard Dentine.

Photo-micrograph of a section of a composite odontome found on the left side of the mandible in a boy aged 14.

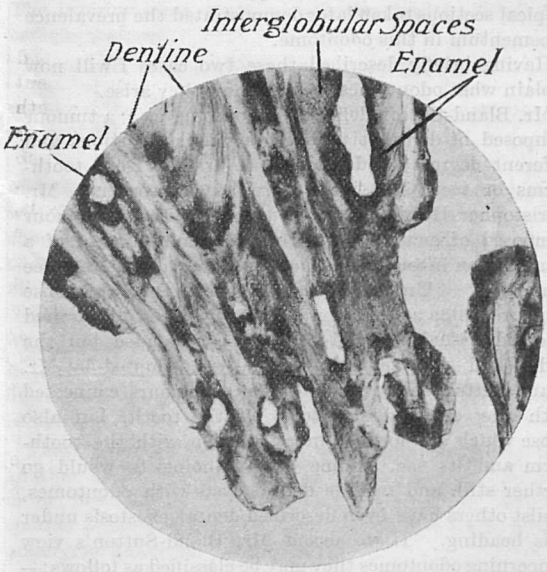


FIG. 3.

The other case of interest referred to occurred in a youth, aged 19, who was a patient of Mr. Maggs. He had a large cementome in connection with a root of the lower right first molar. Mr. Maggs has kindly lent me the specimen to show you (Fig. 4), and I have here the models of the patient's mouth taken about twelve months after the operation. Before admission into the hospital a lower right second premolar was removed in the hope of reducing the swelling on that side of the

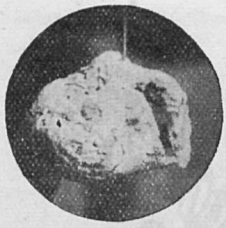


Fig. 4.

Cementome connected with the root of a lower molar.

mandible, but no discharge followed the extraction and the swelling remained as before. When admitted the patient mentioned that he had twice received an injury on the right side of the mandible; at the age of thirteen he was hit by a stone (which was thrown at him), and three years later a cricket ball struck him at the same part of the jaw. As a child he suffered from rickets. The operation was performed a few days after the patient was admitted and the tumour came away in three pieces. On examination after its removal from the mouth, this tooth tumour was found to be a hard, oval, nodular mass, containing patches of soft bone interspersed; the posterior root of the first lower molar was firmly united to it at its upper surface, and microscopical sections taken later demonstrated the prevalence of cementum in this odontome.

Having briefly described these two cases I will now explain what odontomes are, and how they arise.

Mr. Bland-Sutton defines an odontome as "a tumour composed of dental tissues in varying proportions and different degrees of development, arising from tooth-germs or teeth still in the process of growth." Mr. Christopher Heath restricted the term to "a tumour composed of enamel, or dentine, or cementum, or of a combination in varying proportions of any of these three elements." Under the latter definition only those tumours which arise in connection with the fully-formed calcified tissues of the tooth can be included, but the wider and more complete definition adopted by Mr. Bland-Sutton embraces not only all tumours connected with the calcified structures of the tooth, but also those which are formed in association with the tooth-germ and its sac. Some few pathologists would go further still, and include dental cysts with odontomes, whilst others have even described dental exostosis under this heading. If we accept Mr. Bland-Sutton's view concerning odontomes they may be classified as follows:—

	TYPE.	ORIGIN.
1.	Epithelial odontomes	From the enamel organ.
2.	Follicular odontomes (Dentigerous cysts)	From the tooth sac.
3.	Fibrous odontomes	
4.	Cementomes	
5.	Compound follicular odontomes	
6.	Radicular odontomes	From the papilla.
7.	Composite odontomes	From the whole tooth-germ.

Before it is possible to appreciate the manner in which odontomes arise it is necessary that we should understand accurately the mode of development of the tooth-germ. Let me remind you, first of all, that the enamel organ is derived from the deeper of the two layers of epithelium which form the mucous membrane covering the jaws. A finger-like process of epithelium, dipping in from the dental lamina, is the first indication of this germ, and its form is gradually changed with the further growth until it assumes the familiar shape of the fully-developed enamel organ containing its four definite series of cells: (1) internal epithelium, (2) stratum intermedium, (3) stellate reticulum, (4) external epithelium. Epithelial odontomes find their origin in this part of the tooth-germ which is called the enamel organ. The dentine organ consists of the papilla of mesoblastic tissue found immediately underneath (deep to) the enamel organ, and its formation takes place concurrently with that of the enamel organ. It is essentially different in character from the enamel organ, for whereas the latter contains nothing but cells and intercellular substance, in the dentine organ we have also fine connective tissue, a plexus of nerves, and a vascular system. The dentine organ of man is quite similar to the dentine organ of the lower animals, and it is therefore not surprising that in some radicular and composite odontomes such structures as osteo-dentine, vascular-dentine, and plici-dentine are found, as well as inter-globular spaces and other irregular areas intermingled with the hard-tubed dentine which is usually found in the human tooth.

The dental sac, or follicle, may give rise to four varieties of odontomes, as shown in the above table. Normally it helps to form both the cementum and the alveolo-dental membrane, and it originates primarily from the cell activity occurring at the base of the dentine organ, but it is also developed from the changes which take place in the cells outside and around this organ and the enamel organ. The sac is composed of fibrous tissue, blood-vessels, and cells, and spreads outwards and upwards from the base of the dental papilla, gradually enveloping the whole tooth-germ.

Passing on to consider briefly the various types of odontomes which have been classified above, the first are—

Epithelial odontomes.—These possess a firm capsule, and are composed of a collection of cysts of various shapes and sizes, separated by fibrous septa. They arise in connection with the enamel organ, the growth being slow and insidious, and the cavities of these cysts contain a brownish mucoid fluid. Microscopical sections show a fibrous stroma, branching and anastomosing columns of epithelium which are arranged to form alveoli, and the central cells have been compared to the cells of the stratum intermedium of the enamel organ, whilst the outer cells are columnar in shape. Various names such as: multilocular cystic epithelial tumour (Eve), cystic sarcoma, adeno-sarcoma, as well as the term epithelial odontome have been given to this

tumour, but the last is now more generally accepted. Different hypotheses have been offered as to their origin, of which the following may be mentioned: (1) from persistent portions of the epithelium of the enamel organ, (2) from enamel organs of teeth which should normally go on to full development, (3) from epithelial ingrowth around the dental alveoli.

Of those which arise in connection with the tooth-sac, the FOLLICULAR ODONTOME, or dentigerous cyst as it is so often called, is the one most commonly recognised. It would be well to discard the latter name, because it has come to be used very loosely, and in consequence of this a dermoid cyst has sometimes been confused with a follicular odontome. Remember that all cysts which bear teeth are not necessarily odontomes. Tomes has shown that the development of these odontomes is due to the excessive formation of fluid between the enamel and the wall of the follicle, occurring in a retained tooth. This fluid is present normally in small quantity after the complete calcification of the enamel, and is discharged when the tooth erupts; but if the tooth is retained, the fluid increases and distends the surrounding tissues in the form of a cyst. It is suggested that the fluid is secreted from the remaining epithelial cells of the enamel organ, and that the cells themselves have undergone liquefaction, like the stellate cells of the normal enamel organ. The swelling thus formed contains a viscid fluid and the crown, or part of an incompletely developed tooth, and the cyst wall represents the follicle of an unerupted tooth. These odontomes usually arise in connection with teeth of the permanent series, though they have on rare occasions been found in association with the deciduous teeth.

Tumours spoken of as FIBROUS ODONTOMES occur most frequently in patients who have had rickets. The explanation commonly offered for the late eruption of teeth in rickety patients is that the follicle-walls of the teeth are unusually dense, and eruption is thus impeded; if the sac is very much thickened the tooth may be entirely suppressed, producing the condition known as a fibrous odontome. Microscopically the sac shows laminated wavy fibres and a small quantity of calcified matter. Heath described these growths as fibroid and fibro-cellular tumours.

If in such a capsule as that just referred to lime salts are deposited, and ossification follows, the structure formed will be cementum, and the tumour is called a CEMENTOME. Such a development can be easily understood when we remember that the part of the tooth-germ involved is that which goes to build up cementum, or the covering to the root of the tooth.

Odontomes of this character are found frequently in horses, but they are rare in man. The second case (Fig. 4) described at the commencement of the lecture is an example of a large cementome occurring in a man. If the same thickened capsule ossifies in scattered pieces, instead of being united in one piece, the tumour will contain small fragments of cementum, dentine, and enamel in the form of a large number of denticles. As many as four hundred such fragments may be contained in a COMPOUND FOLLICULAR ODONTOME. Thus it is seen that of the tumours arising from aberrations of the tooth follicle, the first, or *follicular odontome*, is due to excessive secretion of fluid between the enamel and the follicle wall; the *fibrous odontome* occurs if the follicle undergoes hypertrophy, if in addition to hypertrophy calcification occurs in the follicle, a *cementome* results; and lastly, if instead of calcifying in one piece the follicle is ossified in scattered pieces, the tumour will be composed of a number of small denticles, and it is called a *compound follicular odontome*.

A RADICULAR ODONTOME comes directly from the dental papilla, and arises whilst the root of the tooth is in the process of formation.

In the human subject no enamel can occur in these odontomes, because the further growth of the tumour begins after the crown of the tooth is complete; and they therefore consist of dentine and cementum in varying proportions, since these two tissues are the result of the activity of the dental papilla. In a typical radicular odontome the outer layer is composed of cementum; within this casing dentine is found having tubules radiating outwards with more or less regularity, and inside this a nucleus of pulp tissue may remain. The interior often contains osteo-dentine, or ill-defined osseous material.

They have been subdivided into three groups:—

(*a*) Radicular dentomes.
(*b*) Radicular osteo-dentomes.
(*c*) Radicular cementomes.

and the principal constituent of the radicular odontome will determine the particular group into which each should be placed. Whilst rare in man, radicular odontomes are common in the lower animals, and especially amongst those whose teeth are of persistent growth.

The term COMPOSITE ODONTOME is applied to those "hard tooth tumours which bear little or no resemblance in shape to teeth, but occur in the jaws, and consist of a disordered conglomeration of enamel, dentine, and cementum."

These tumours may also be considered composite in another sense, for they are often composed of two or more tooth-germs indiscriminately mixed, in which enamel organs, dentine papillæ, and follicle walls have undergone abnormal development.

A cementome may contain two or more teeth, but such an odontome would be quite distinct from the composite type, for in the former case the individual teeth involved can be clearly defined, whilst in the latter the various parts of the teeth composing the mass are irregularly mixed. Composite odontomes have so far only been met with in man, and for a long time it was thought that they occurred only in the mandible, but it is now known that they frequently exist in the maxilla, and also that when they are developed in the latter position they are likely to attain to a larger size.

The specimen first shown (Fig. 1) is an example of a very small composite odontome weighing 21·5 grains, and the microscopical sections (Figs. 2 and 3) demonstrate the manner in which the structures may be arranged in odontomes belonging to this group.

The largest odontome found in the human mouth, of which record has been made, is to be seen in the Guy's Museum. It weighs nearly 15 ounces, and was originally described by Mr. Hilton in the Hospital Reports for 1836, as an exostosis, but Mr. Bland-Sutton, who has had an opportunity of investigating this tumour, has no hesitation in stating that it originated in one or more enlarged tooth follicles, and is an odontome.

In this one lecture it has only been possible to summarise the different types of odontomes, but I hope on a future occasion to deal with some of the points in greater detail.

Dental News.

A MEMBER of the Dental School has left in our hands a few books that may prove of interest to those who are curious concerning the methods and manners of Dental Surgery during the early part of the 19th century. Even a cursory glance reveals the melancholy fact that King George IV. was a much-tried man, for we find that there were two Surgeon Dentists appointed to "His Majesty and Royal Household," and that another author uses the Royal Arms as decoration to his booklet; moreover, all these gentlemen differ hugely in opinion and practice.

One cannot read the volumes in question without dimly recollecting a certain proverb concerning the possibilities of ease accruing to heads that wore the symbol of kingship.

We can lend any of the following to such as may be interested in the subject:—"Practical Observations on the Human Teeth," 1783. "Familiar Dissertation on the Causes and Treatment of the Diseases of the Teeth," 1813. "Lectures on the Natural History of the Teeth," 1820. "Opinions on the Causes and Effects of Diseases in the Teeth, etc.," 1822. Ditto, 1824. "Description of New Patent Instrument for Extracting Teeth," 1826. "Outlines on the Anatomy and Physiology of Teeth," 1834. "Patent Auroplastic Principle," by Edwin Truman," 1849.

We publish the following case:—

R. M., æt. 14, had her $\frac{|}{6|}$ extracted on January 29th. The extraction was a difficult one, and was followed by some swelling of the gum and some periodontitis in $\frac{|}{7|}$ which was erupting somewhat late.

On February 13th, the patient presented herself for the treatment of another tooth, and it was noticed that she suffered from open bite. On examination it was found that $\frac{7|}{7|}$ were the only teeth in the mouth that occluded. The patient said that the open bite only dated from a day or two after the extraction on January 29th, which was at first followed by pain and tenderness in the erupting tooth, though subsequently this passed off. It was decided that no treatment was necessary, but that the whole force of the bite acting on this one tooth would be sufficient to drive it back into its socket. This proved to be the case, and in a fortnight's time the bite was practically normal.

The cause of the elongation of the tooth was probably to be found in the extreme periodontitis set up by the difficult extraction of the adjacent one, causing the tooth to rise from its socket, aided, perhaps, by some forcible displacement upwards during the extraction. Although the lengthening of the tooth was slight, its position at the back of the mouth was such that its effect was amplified in the front of the mouth, the upper and lower incisors being propped to the extent of at least an eighth of an inch.

WAR OFFICE NOTICE.

WAR OFFICE,
7th March, 1906.

The services of an additional Dental Surgeon are required for duty with troops in the United Kingdom from 1st April next.

He will be required to devote his whole time to military duty, and will receive an inclusive salary of £365 per annum, and travelling expenses. The period of engagement will be for one year, and under conditions specified in the contract. The necessary dental appliances will be provided.

Applications should be addressed to the Secretary of the Army Council, 68, Victoria Street, S.W., not later than March 21st, and should be accompanied by evidence of age and qualifications, and not more than three recent testimonials.

Dental Society.

THE usual monthly meeting was held on Tuesday, February 20th, the President, Mr. Hopson, occupying the chair. The minutes of the previous meeting having been read and confirmed, Mr. Marsh showed, as a casual communication, a case of necrosis of the superior maxilla, which excited some discussion, in which the President and Mr. Dowsett, among others, took part.

Mr. S. G. Elliott then read an interesting and carefully prepared paper upon "Diseases of the Gums," which was attentively listened to. Messrs. Hopson and Dowsett followed with some valuable remarks upon the same subject, and questions were put to the reader of the paper by Messrs. Fuller, Simms, Reeve, Freer, Margolies, Hanna and Gibbings, which he satisfactorily dealt with at the close of the meeting.

At the next and last meeting of the Society Mr. C. C. Freer will read a paper on "Bridge-work."

Recent Additions to the Wills Library.

PRESENTED BY THE GOVERNMENT OF INDIA.

Scientific Memoirs—

On the Morphology, Teratology, and Diclinism of the Flowers of Cannabis.

Oriental or Delhi Sore.

On a Parasite found in the White Corpuscles of the Blood of Dogs.

On a Parasite found in Persons suffering from Enlargement of the Spleen in India. Third Report.

The Specificity of Antivenomous Sera, with special reference to a Serum prepared with the Venom of Dabaia Russelli.

Snake Venoms in relation to Hæmolysis.

Hæmogregarini Gerbilli.

On Kala Azar, Malaria, and Malarial Cachexia.

Serum-therapy of Plague in India.

PRESENTED BY THE GOVERNMENT OF EGYPT.

Records of the School of Medicine, Cairo, Parts II. and III.

PRESENTED BY THE SUDAN GOVERNMENT.

First Report of the Wellcome Research Laboratories, at the Gordon Memorial College, Khartoum.

ADDED BY THE WILLS LIBRARY COMMITTEE.

Starling's Physiology, an additional copy of the latest edition.

Berry's Surgery of the Thyroid Gland.

Baldwin and Larned's Syphilis in Dentistry.

Journal of Obstetrics and Gynæcology.

An important addition has just been made to the Davies-Colley Memorial Collection in an English translation of "A System of Practical Surgery," by Bergmann and Bruns. The work is in five large handsomely-bound volumes, the letterpress and numerous illustrations being exceedingly good.

Appointments.

Civil.

CRESSWELL, S. C., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer of the Merthyr Tydvil Union.

SHARPE, F. A., M.B., B.S. Lond., has been appointed Resident Medical Officer, York Dispensary.

Military.

Captain G. TRAVERS BIRDWOOD, M.D., Indian Medical Service, Bengal Establishment, is promoted to be Major from 30th January, 1905. Major Birdwood was in the Abor Expedition, on the North-West Frontier of India, in 1894; with the Waziristan Expedition, in 1894–5 (medal with clasp); and in the operations on the Samana and in the Kurram Valley during the campaign in 1897–8 (medal with three clasps).

Sport.

Rugby Football.

GUY'S v. LONDON.

FINAL HOSPITAL CUP TIE.

This match was played at Richmond on March 6th in perfect weather. The ground was in good condition and a large number of spectators were present, including many members of the staff of both Hospitals.

Guy's won the toss and Harrison kicked off for London. Lee took the ball and kicked into touch. A scrum resulted from the throw out, and a free kick was given against Guy's for off side; good kicks by Llewellyn and Jones sent the ball down to the London twenty-five. It was apparent that the London forwards were much better than Guy's, and on the line out and in the scrums they had much the best of it. London rushed the ball down the ground and Gibson saved, but was well tackled by Monteith, then London almost scored, but Jones saved by a good kick. A free kick was given to Guy's and well returned by Wood, the London full back. London then had a kick at goal from a penalty awarded them, but the kick fell short. London got the ball well away from the scrum, but the Guy's three-quarters by good collaring checked a dangerous passing rush. Then when near the line Harrison passed to Monteith, who scored under the goal. Gibson converted. About this time Hind and Burgess were injured, but both resumed after a slight rest. Pinching and Saunders dribbled the ball down the ground, but Palmer with a good kick sent the play back to the Guy's twenty-five. Half time was called with London on the Guy's line. London one goal (5 points), Guy's nil.

Saunders kicked off, and from a scrum Jones obtained possession and made a good run, then Stringer collared Wood well, and Guy's almost scored. London, however, soon recovered and rushed the ball down the ground, where Lee saved by a good kick. Hereabouts London were having much the best of the game and were obtaining the ball from the scrum every time. Vernon missed an easy score by passing forward, and Guy's touched down. Then Baines made a good run and passing to Lloyd at the right moment the latter scored under the posts. Gibson again converted. After the kick out they nearly scored again, but Stringer saved well. Guy's had a free kick given them, but Lee's kick was charged down, and once more London pressed Guy's hard. Jones and Alcock made good kicks, and Saunders made a good run, but again the London forwards brought the ball back. Scott took the ball well on the line out and passed to Monteith, who scored; no goal resulted. London continued to do most of the attacking, and time was called with London 2 goals and 1 try (13 points), Guy's nil.

REMARKS.—At full back Gibson was fairly safe, but at times did not take the ball on the fall. Stringer was the best of the three-quarters. All defended well,

but few chances were given them to show their attacking powers. Jones at half was very good, his kicks sending London back on many occasions. The forwards all played a good hard game, but the weight and size of their opponents told in the end. All tackled with vigour and pluck, and it only remains to look forward to regaining the Cup next year. Although one cannot congratulate the team on winning the Cup, one can congratulate them on putting up a good fight for it. Teams :—

Guy's.—H. G. Gibson (back): L. B. Stringer, G. Llewellyn, H. Lee, F. Alcock (Capt.) (three-quarters); T. P. Jones, P. T. Monaghan (half-backs); W. G. Pinching, S. McK. Saunders, W. E. Williams, A. Alcock, G. R. Hind, P. Smith, L. Milton, H. R. Mullins (forwards).

London.—W. W. Woods (back); A. C. Palmer, M. B. Baines, T. P. Lloyd, R. J. Vernon (three-quarters); R. Burgess, H. E. H. Oakeley (half-backs); E. MacEwan (Capt.), C. T. Scott, H. G. Monteith, L. W. Sharp, H. Gibson, S. R. Harrison, W. C. Hodges, W. G. Parkinson (forwards).

Referee: Mr. W. Williams. Touch Judge: Mr. A. C. Martin.

GUY'S v. GUY'S OLD PLAYERS.

This match was played at Honor Oak Park on February 28th, and resulted in a win for Guy's by 17 points to 8.

The Old Players' team, got together by McEvedy, was hardly representative, as the three London Welshmen, A. F. Harding, F. Williams and J. C. Jenkins were helping them. Gibson turned out for the first time after his accident, but Archer was unable to play, and his place was taken by Sprague. The day was fine but windy, and the ground was in quite good condition. Saunders kicked off against the wind, and, after a series of scrums, F. Williams broke away and dribbled down the field and over the line, but F. Alcock prevented a score by touching down. Lee dropped out, and from one of the following scrums the Old Players heeled, and their backs became dangerous, but Llewellyn relieved with a good kick. Guy's then attacked, but Morgan made a mark and found touch near the half-way line. From the line-out the Guy's forwards took the ball to their opponents' twenty-five, but Louisson held them up. From some loose play Saunders gained possession and ran down the field, but was collared inside the opponents' twenty-five. Soon afterwards Jones picked up the ball, and, making a splendid opening, passed to F. Alcock, who ran round behind the line and scored between the posts; Lee converted. For some time after the drop out, play was very even, but later the Guy's defence was beaten by a forward rush, and Williams was able to score between the posts; Harding converted. On re-starting, Guy's attacked, and, the Old Players heeling in their own twenty-five, Jackson punted into Gibson's hands, Gibson kicked across to Stringer, and he, after running a short distance, kicked too hard, and the ball was touched down. After the drop-out, Mullins picked up in a forward rush and passed to Llewellyn, who passed to Stringer, and he was only prevented from scoring by Patey, who tackled him splendidly. Play then returned to midfield, and the Guy's forwards, who were playing very well in the loose, rushed down, and Pinching kicked over and scored; Lee failed with the kick. Shortly afterwards the whistle went for half-time, with Guy's leading by 8 points to 5.

In the second half Harding was taken out of the scrum and played as an extra three-quarter, while McEvedy played half with Louisson. Jenkins kicked-off, and soon Llewellyn started a passing movement in which Jones, Lee and Alcock took part, but Alcock was stopped a few yards from the line by one of Morgan's characteristic tackles. The Old Players' three-quarter line then got going, but were held up by Orpen knocking on. From a scrum in the Guy's twenty-five the ball was heeled, and Jones put in a splendid kick, which relieved the pressure. The Old Players' three-quarter line again attacked, but Morgan knocked on in trying to take a difficult pass. The Guy's forwards retaliated with a grand rush, and the Old Players were forced to kick dead. After the drop-out, McEvedy made a good run and passed to Thompson, he passed to Morgan, who scored. Harding made a splendid attempt at goal from a difficult angle. Soon afterwards Morgan was only prevented from again scoring by Llewellyn coming across and tackling him near the line. Jones relieved with a run, and the Guy's forwards, led by Saunders, dribbled into their opponents' twenty-five. Saunders kicked across to Stringer, who had a fine chance of scoring, but stopped to pick up, and was tackled. The Old Players' forwards kicked down the field, and the ball went to Gibson, whose kick was charged down by Williams. Lee made a mark and put in a long kick, which Harrison fielded, and after running some distance was tackled. A. Alcock then led the forwards in a rush, and scored himself, wide out; the kick failed. Harrison dropped out, and Llewellyn returned with a good kick. Soon afterwards A. Alcock gained another try, this time between the posts; Lee's kick hit the cross-bar. Just before Alcock's second try Jones was hurt, and had to leave the field. The game was nearly at an end when Mullins, from a line-out, threw wide to Stringer, who scored; Mullins failed with the kick. The whistle then went for no side, Guy's being victorious by 1 goal and 4 tries, to 1 goal and a try.

The game was very fast throughout. The Guy's forwards were clever in the loose, while the Old Players brought off some splendid passing bouts. The Guy's backs tackled well, but their passing was not great. Llewellyn played a splendid game, and Patey, at back, helped the Old Players considerably. Team :—

Old Players.—P. E. Patey (back); E. T. Morgan, L. J. Orpen, M. Harrison, P. F. McEvedy (three-quarter backs); M. Louisson, P. Jackson (half-backs); A. R. Thompson, A. L. Tolhurst, W. H. Robinson, D. Trail, T. B. Layton, A. F. Harding, F. Williams, J. C. Jenkins (forwards).

Referee: Mr. H. G. Harnett.

GUY'S "A" v. BART.'S "A."

Inter-Hospital Junior Cup-Tie (Semi-Final).

The first two meetings having each ended in a draw, Guy's met Bart.'s for the third time in the Junior Cup at Chiswick, on Tuesday, February 27th. For the first twenty minutes the Guy's forwards were hopelessly ragged, and during this time Bart.'s scored twice; both tries should have been scored if the forwards had come round quicker. Before half-time Guy's scored through Covell, and Ball, kicking a good goal, the teams crossed over with Bart.'s a goal and a try, and Guy's a goal.

In the second half, the Guy's forwards played a vastly improved game, and soon gained the upper hand. After Stout had scored from a good forward rush, Baker and Ball quickly added two more tries. In the last minute, Lewis-Jones secured from a cross kick by Cutler, and ran over, the final score reading—

GUY'S	...	2 goals, 3 tries.
BART.'S	...	1 goal, 1 try.

Guy's.—P. E. H. Patey (back); W. T. Clarke, C. E. Lloyd, G. C. Covell, T. Lewis-Jones (three-quarters); F. Cutler, L. T. Baker (halves); P. Smith, L. L. C. Reynolds, W. H. Robinson, C. E. Sprague, M. E. Ball, D. Stout, E. L. Elliott, M. M. Munden (forwards).

Remarks.—In the first half, Guy's looked very much like being beaten, the forwards seeming to lack dash; but in the second half they pulled themselves together, and played splendidly. Patey was very good at full-back.

The Junior Final has been fixed for Monday, March 12th, when London are to be met, and it is to be hoped a good following will turn up for the match.

Association Football.

LONDON (Holders) v. GUY'S.

Semi-Final Cup Tie.

This match was played on Bart.'s ground at Winchmore Hill. Denning having won the toss, Guy's played with the wind.

From the start Guy's went straight away and pressed, London backs having to concede a corner, but without result. After the kick-off the game had to be stopped for a few minutes, the London centre half being rather badly winded. Both King and Whitley had very bad luck in not scoring. Barnett, from nearly half-way, sent in an excellent shot which hit the cross-bar, and, from an ensuing mêlée, Barker received from Witts and scored our first goal. After this London got away once or twice, but found Wood quite safe. Half-time, 1–0.

On the re-start, there was some excellent passing between our forwards, Whitley and King being very conspicuous, Barker received the ball from King, and, sending in an excellent centre, Witts notched our second goal. Soon afterwards, from a misunderstanding between Guy's backs, London got through and scored, owing to Wood misfielding the ball. From this point to the end the game became somewhat scraggy, London pressing. Score, 2–1.

Remarks.—One great feature of the match was the splendid centreing of Barker. The inclusion of Whitley and King greatly strengthened our forwards, the weakest of whom was Witts, who must show much more dash in the final. Too much cannot be said of the half-backs and the backs. Wood, in goal, was not troubled much.

Pavy Gymnasium.

Annual Exhibition of Boxing.

Dr. Pavy came down on February 23rd, and took the chair at the annual show of boxing, fencing and gymnastics, which was organised by our enthusiastic secretary, E. P. Minett. The evening's entertainment reflected the greatest credit on its organiser, and those present were enabled to witness some fine performances by amateur champions and others in the front rows of the boxing world.

Were we to let ourselves loose on the subject of boxing, and say all that we want to say about it, the present issue of the Gazette would not be large enough by a long way to hold half our commendations. It is the most natural athletic exhibition of the sporting character of the British race. As an athletic exercise *per se*, it is some distance ahead of any other game to teach strength, activity and endurance, and having got over the first dislike of having one's face knocked about—a dislike soon lost—there is a wonderful fascination about the sport. But by far the most important side of boxing is its moral aspect, its ethical side—its spirit. It teaches a man to take a knock-down blow and come up smiling for another go. This is more useful to a man than most things when he is out in the world, and gets those hard punches from Fate, or from his own mistakes, which are inevitable to all men. It teaches that skill and cleverness will often overcome brute strength, and that dogged perseverance and pluck will sometimes overcome both; in fact, it inculcates many lessons that go to make a good man and a good citizen, especially according to English ideas.

However, we must get back to the Pavy Gymnasium, having got something off our chest in an attempt to back up Mr. Higgens and Mr. Minett in stimulating some active enthusiasm in the noble art of self-defence at Guy's.

Two bouts by Guy's men, M. J. Marks v. A. Baker, and C. C. Freer v. T. E. A. Carr, opened the proceedings, and then E. A. Fearman (Light Weight Amateur Champion) v. A. J. Miner (Bantam Weight Amateur Champion) gave a highly-polished three rounds contest, which was much appreciated. J. Hoare (Middle Weight Champion) boxed with the secretary, E. P. Minnett and the clever manner in which the latter stood up to so redoubtable and heavy an opponent was roundly applauded. Mr. Hoare then took on Mr. Coster in a hard-hitting bout, and was followed by Messrs. Miner and Pye of the Lynn Boxing Club—both going for all

they were worth. Excellent fencing bouts were given by Messrs. Haycraft and Darke (of Guy's), and E. H. Amphet and Walter C. Hill (Landa Fencing Club), the latter being a very spirited and scientific show by two masters of the art. Then came more boxing by Messrs Roger and Morgan (both winners of open competitions), and Mr. Wells (Light Weight Champion, 1904–5) v. T. Vanner, one of the best fights of the evening, Wells being a most determined two-handed boxer who follows his man up and gives him no rest. Messrs. Moss v. Pearson, and Ryder v. Morgan, were followed by Mr. Higgens and Professor (of boxing) Jem Brock, and the audience went mad with delight as these two smacked each other round and round the ring in an endeavour to knock the other out. It is difficult to imagine a finer object-lesson than that given by Mr. Higgens, or one that is as likely to do good as an example of what a man should be capable of when he is sixty, if he leads a proper physical life while making his living with his brains. No doubt many will say that there are other more suitable exercises for a man of that age than boxing; but we deny it, and say that if a man commences early with his boxing, he can keep it up till long past middle age with more benefit to himself than he would derive from many other games, provided he practises it often enough, and does not play tricks with his constitution.

After Mr. Dryden had boxed Mr. Bondreig, there was a gymnastic display under the leadership of Sergeant Gilbert, in which Messrs. Hunt, Caine, and Dyson, of Guy's, took part. Two middle-weight champions, R. C. Warner and E. Mann, who have beaten one another for the championship, then gave three splendid rounds, and were followed by an old Guy's man, A. Allport (winner of German Gymnasium Heavy-weight Open Competition), who boxed with W. G. Ross (Middle-weight champion). A bout between Messrs. Dryden and Wright brought a most instructive and entertaining evening to a close.

Dr. Pavy made his usual happy little speech, and Mr. Higgens thanked him and all others concerned for their assistance towards the success of the evening. Mr. Minett, in the course of a short speech, intimated that he should have to pass on the office of secretary to some one else—a statement which was received with great disapprobation. It is to be hoped, for the good of Guy's boxing, that he will continue to act as secretary as long as he is at the hospital.

Change of Address.

Lieutenant R. Grenville Anderson, R.A.M.C., from Aldershot to Gibraltar.

Dr. Gerald Burton-Brown, from 185, Willesden Lane, London, N., to Milton Lodge, Iver, Bucks.

Dr. C. D. Fenn, from Park House, Diss, to 27, Henley Road, Ipswich.

Mr. G. Dunlop Martin, M.R.C.V.S., from Simla to Muktesar, Naini Tal District, United Provinces, India.

Dr. T. Brice Poole, from 53, Trinity Road, Wimbledon, S.W., to Laurence House, Valkyrie Road, Westcliff on-Sea.

Dr. Carrick H. Robertson, from Athol Lodge, Garlies Road, Forest Hill, S.E., to Waihi, Auckland, New Zealand.

Dr. H. M. Stewart, from Walton House, Lordship Lane, S.E., to Dyffryn, 123, Thurlow Park Road, Dulwich, S.E.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Directions to be followed in sending *Diphtheritic Membrane*:—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. WELLS

NOTICE.

C., SOUTH NORWOOD.—This material is completely necrosed and will not stain. All we can say is, that it looks like a very soft and degenerated carcinomatous growth. PATHOLOGIST.

Births.

STEELE-PERKINS.—On February 20th, at 47, Southernhay W., Exeter, the wife of Shirley Steele-Perkins, B.A., M.B., B.C. Cantab., M.R.C.S. Eng., L.R.C.P., of a son.

TIPPING.—On February 4th, at Tyldesley, Palmer's Green, N., the wife of Harold Tipping, M.D. Lond., M.R.C.S., L.R.C.P., of a son.

Marriage.

GOBLE—GEARY.—On February 24th, at St. George's, Hanover Square, W., by the Rev. F. C. Noyes, Edwin Wallace Goble, M.R.C.S. Eng., eldest son of E. J. Goble, of Stamford Hill, N., to Beatrice Maude, youngest daughter of the late Thomas Woolloton Geary, of Swinton, Wilts.

EDS.—H. C. C. & C. L. L.

GUY'S HOSPITAL GAZETTE.

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A Word of Farewell.

THIS year is to see several changes in the Hospital Staff, and though some of them are already guessed at—public property in a sense, though as yet not officially proclaimed—the retirement of the two senior members of the Staff is known to all. At the end of this month Mr. Higgens retires from the post of senior ophthalmic surgeon, and a fortnight later Mr. Clement Lucas follows him, resigning the office of senior surgeon to the Hospital to pass into the distinguished serenity of the Consulting Staff. On Wednesday morning last, Mr. Lucas delivered his last lecture on Clinical Surgery in the Physiological Theatre, and at its conclusion he permitted himself a few farewell remarks. He said little, speaking with evident feeling, but the manner in which he spoke showed that he regarded the occasion as a memorable one. There were sentences in his closing address which his hearers could very well carry away with them, and words of advice which they would do well to ponder over. "A man's best descendants, in my idea, are the offspring of his intellect." "I would have you bear in mind the value of kindliness; many a man proves an utter failure when he comes to treat private patients, owing to his want of consideration and gentleness." There was a good attendance both of senior and junior men, Leucocytes turning up in force to take part in the farewell demonstration to their old chief, and the ovation which greeted the commencement and ending of his speech, testified to his popularity and the esteem in which he is held.

We can all of us, colleagues as well as students, appreciate the spirit of his valedictory remarks, but only his predecessors who have had personal experience of that translation to the comparative obscurity of the consulting staff, can adequately estimate the feeling of regret that such severance of connection with the active life and work of the hospital entails. There is a touch of pride in saying, with Entellus, "*hic victor cæstus artemque repono*," but it is commingled with a dash of sadness which those who have victories to win yet and skill to acquire can but imperfectly comprehend. It means leaving the stage to vanish into the shadows at the back, and we are apt to associate such retirement with decay of power, with a decline of craft and a deterioration in value, with suggestions of that unhappy termination of our activities which Americans style "Oslerisation." How utterly untrue and inapplicable such associations are there is surely no necessity to state. They are fallacious and inappropriate in most ordinary cases; they are doubly so in connection with a retirement which is rendered inevitable by the exigencies of our system that, rightly or wrongly,

fixes a limit to the active work of the members of our staff.

Neither in Mr. Lucas's case nor in that of Mr. Higgens will those of us who have been privileged to work with or under them fall into the error of associating their withdrawal from the active list with the padded chair of decrepit old age. In passing from us, we may be sure that both will still cultivate that enthusiasm and activity which, as Emerson remarks, show that the man is in no condition old. Mr. Lucas will look after his supinators, and Mr. Higgens will no doubt prove to us on future occasions that he still has a love for the gloves and a regard for the ring. For almost half a century both of them have been actively connected with this hospital, and their reputations and popularity are known wherever a Guy's man is to be found. It would be almost an impertinence on our part to comment on their professional careers, considering how well known are their lengthy records of sterling good work. During his long period of office each of them has influenced the life and work of generations of men, and given to the hospital and medical school an amount of service and time of which the outside public has little conception. "They laid their bones to and laboured," can be said of both. Each of them will be missed, for each has made himself known not only to the senior men, with whom more particularly he has been associated, but equally with the juniors—Mr. Higgens as a boxer and Mr. Lucas as the genial and enthusiastic president of the Athletic Club. The former's feats in the Pavy Gymnasium are matters of history. Mr. Lucas's interest in the annual sports at Honor Oak Park is well known, as also his equally keen enthusiasm in the yearly tug-of-war between the various firms for the Lucas cup. At such struggles he made a point of being present, vigorously encouraging his dressers in their efforts to pull their opponents over the crease.

As friends and teachers they have earned our respect and esteem, and in bidding them farewell we feel conscious that we are voicing the general sentiment in wishing them a long and happy connection with the hospital in their capacities as members of our Consulting Staff.

Passim.

THE first Soccer team has succeeded in bringing back the Soccer Cup to the Smoking Room, after a vigorous and exciting struggle. So in a measure we have gained what lawyers would call "a partial set-off" against our failure to retain the Rugby Cup, and that in itself is matter sufficient for congratulation. But it is whispered that we stand a good chance of losing to London in another branch of hospital sport—in the coming boxing and fencing contest for the Inter-Hospital Championships. Our indefatigable secretary has been observed to look unusually gloomy over his lunch, and to hint, in tones of blended sadness and exasperation, that the competition, which is fixed to take place on Thursday next, in the Pavy Gymnasium, will have to be scratched unless men exhibit a keener appreciation of their duties towards the Hospital. A list has been posted on the board in the Smoking Room, and those whose names appear on it are earnestly requested to prepare themselves for Thursday's combat. If the competition is really to be scratched, it means simply a walk-over for our opponents; a contingency which none of us would willingly contemplate with equanimity. Mr. Minett has done his best to infuse enthusiasm into his team, and if we succeed in winning against London, our success will to a great extent be due to his energy and zeal.

THE Nurses' Photographic Society is to be congratulated on the success of Tuesday's exhibition, particulars of which appear elsewhere in this issue. Not only were the exhibits technically praiseworthy, but the majority of them gave proof of true artistic taste and feeling on the part of the competitors, and Mr. Bayley's tribute of appreciation was well bestowed. The society was formed in 1904, and has so far only held one exhibition, the present one being the second which it has attempted. It is amalgamated with the Past and Present Nurses' League, and affiliated to the Royal Photographic Society. Meetings are held in the Nurses' Home "once a month, or oftener if

possible," and open nights, when admission is by ticket, are held when lantern lectures are given by members. The society, though so young yet, is already self-supporting, and members have the use of a well-fitted dark room. There is wide scope for the abilities of the society, and its success has hitherto been so encouraging that the annual exhibition of prints is likely to become one of those pleasant and interesting interludes which in the routine life at the Hospital are all the more enjoyable because they come so seldom.

The Pupils' Physical Society ended an interesting and instructive session with the final meeting a fortnight ago, when the prize essay for the Treasurer's Prize (which we hope to publish shortly) was read and discussed. The society's clinical and pathological evenings have been, on the whole, unusually well attended, and the variety and interest of the specimens shown have been remarkable. On the other hand, the attendance at the ordinary fortnightly meetings has generally been poor. The reason for this apparent lack of interest in the discussions is not very clear, but is certainly not because notice of the meetings has not been posted beforehand. The secretaries have given wide publicity to these notices, which have been stuck up in the smoke-room, dissecting-room, colonnade and library. But, as we have already said, there seems to linger, in the mind of the junior man at least, a doubt as to his qualification for attending the meetings, and it might be well to attach to every notice a footnote reiterating the fact that all students are members of the society. Now that the session is over, the secretaries will be glad to hear from members who have any suggestions for papers or any specimens of interest to show. It is worth while noting that the papers read before the society have not always been exclusively medical or surgical, but have dealt with almost every subject which is of general interest. Thus there has been discussion on the ornithology of the North Sea, on hypnotics and on folk-lore. Members have, therefore, a wide range of choice, and the whole summer session to prepare papers in.

The annual general meeting of the Students' Club will be held in the Anatomical Theatre on Monday next, the 26th inst., at 4.15 p.m. Dr. Pye-Smith has promised to take the chair. The meeting is for the election of new committee members and for the transaction of general business, and the hon. secretary will be pleased to receive the names of gentlemen, duly proposed and seconded, who are willing to serve on the committee.

A proper conception of the value of figures and of statistics is a gift which few of us possess, and which some of us sneer at. We cannot everlastingly be thinking with the aid of the multiplication table, and the average student has so many fancy figures to keep in his head—at least, till the time when he says farewell finally to the mass of useless items which modern examinations require—that he does not care to burden his memory with any extra numbers. Hence the absolute ignorance of the majority of us on points of hospital statistics. It is possible that some of us may be able to state accurately the number of beds in the various wards; it is just probable, also, that there are others who may have some idea of the number of out-patients seen annually, but how many of us have any conception of the amount of work that is done in the Bacteriological Department? Those, therefore, who delight in statistics and in the contemplation of figures, ratios and tables, will be grateful to Dr. Eyre for his Statistical Table of the work done in that department during the last thirteen years. The table gives some interesting information, of value not merely to the statistician, but to all interested in the progress of the hospital, showing, as it does, the marked increase in the work during the last couple of years. Thus, in 1893 the bacteriologist had a slack time, the total number of specimens received for examination during the whole twelvemonth being only eight. In the following year 39 specimens were investigated, and in 1895, 105, the number of specimens increasing progressively, till last year they totalled 1,933. Of the eight specimens dealt with in 1893, four came from the medical and four from the surgical wards; the

next year the surgical wards sent 13, the medical wards 12, and Clinical seven specimens. Since then the average of specimens from the medical wards seems to have been a point or two higher than the surgical mean. In 1893 the ratio of specimens to in-patients was 1 to 535; last year it was 1 to 5; to surgical in-patients it was 1 to 905 in 1893, and 1 to 20 last year. The front surgery seems to send the most specimens, with the medical wards as a bad second, and the monthly average is greatest in November and lowest in April.

The Going-off Dinner of the Residents on Tuesday night, combined as it was with the dinner to the victorious Soccer team, was a distinct success. Messrs. O. V. Payne, Chisholm, A. Leeming, C. Wells and Wood are the retiring residents, and into their places step Messrs. French, Cameron, Jones, Stevenson and Costobadie. The president and vice-president for the ensuing quarter are Messrs. O'Brien and Clarke.

The response to the Clubs' Union Appeal has, on the whole, been very satisfactory, although there is still every opportunity for the generous-minded member to contribute his share towards wiping off the debt of £350. The list published on another page in this issue shows that a sum of £180 9s. has been collected up to date.

We owe an apology to the Committee of "Les Excursions Medicales Internationales," for in the notice of their proposed excursion a phrase was inserted which is open to misconstruction. In order to prevent any such misconception, we are authorised to state that students, who avail themselves of the many opportunities which the excursion offers, will be given every assistance to see the sights of Paris and the other towns they visit. The excursion will not be confined purely and solely to the inspection of hospitals, but the visitors will be shown over the various other places of interest, including the Municipal Markets.

It is always interesting to read what others say about us, and therefore the article in last week's *Munchener Medizinischer Wochenschrift*, in which a German medico describes his experiences in London hospitals, deserves some attention. The visitor seems, on the whole, to have been agreeably impressed by our methods. "St.Thomas, King College, Middle Essex, St. George," and last, but not least, "St. Pierre, Convent Garden Market, Whitechapel Road," seem to have given him the greatest joy, and he strongly recommends them all to his German colleagues.

We would remind those who wish to attend the dramatic performance in aid of the Million Shilling Fund, which is to take place in St. George's Hall, Langham Place, W., on the 11th April, to lose no time in obtaining tickets.

At a meeting of the Shropshire County Council on Saturday last, Dr. Justin McCarthy, of St. George's, was raised to the aldermanic bench. Dr. McCarthy is an old Guy's man who qualified in 1876, and has represented the Wrockwarding Wood Division in his county for the last fourteen years.

Notices.

The Michael Harris Prize for Anatomy.—Mr. H. B. Kent, prize £10.

The Wooldridge Memorial Prize for Physiology.—Mr. J. Lee Atkinson, prize £10; Mr. H. B. Kent, Certificate.

The Junior Proficiency Prizes.—Mr. H. B. Kent, first prize, £20; Mr. C. A. Wood, second prize, £15; Mr. S. J. Darke, third prize, £10; Mr. A. A. Greenwood, Certificate.

Guy's Hospital,
22nd March, 1906.

Remarks on Ventrofixation of the Uterus.

ABSTRACT OF A CLINICAL LECTURE By Mr. J. H. TARGETT.

January 29th, 1906.

Gentlemen,—The operation to which I propose to direct your attention is not often performed at Guy's. Dr. Horrocks is not in favour of it, and I have done it not more than fifteen times. On the other hand, there are some surgeons who perform it very frequently and speak highly of its value. In view of these differences of opinion I do not intend to discuss fully its merits, but I shall give you the results of my own rather limited experience in the matter, and mention some of the objections to the operation which have been put forward. It must be remembered that when an operation is easy and attended with practically no risk to life, it is liable to abuse, or to be performed with unnecessary frequency. No abdominal operation, however simple, can be declared free of risk. Among my fifteen cases I have to deplore the loss of one patient by that awful calamity—pulmonary embolism. The wound was soundly healed and the patient beginning to sit up, when, in a moment, she was gone! (See Postscript page 111.)

The two chief indications for the operation are prolapse and retroversion of the uterus. The majority of my operations have been done for that type of case known as *Retroversion with adhesions*. It would be more correct to say retroversion *from* adhesions, because the backward displacement of the uterus is due to the contraction of fibrous adhesions on its posterior aspect. You are well aware that salpingitis is followed by pelvic peritonitis (the so-called perimetritis), and that the inflamed uterine appendages become glued to the adjacent bowels and to the peritoneum of Douglas's pouch, or to the back of the broad ligaments and the uterus. Though many of these adhesions may in time disappear, yet it always happens that some fibrous bands remain which bind down the appendages and usually prevent the uterus from resuming its natural position. In such cases a pessary is often useless and even harmful, because the uterus cannot be fully restored and the pressure of the Hodge's pessary causes pain by dragging on the pelvic adhesions. If the patient's symptoms are severe —constant backache, pelvic pains, menorrhagia, etc.—the operation of ventrofixation may be recommended. For this purpose the abdomen is opened, and thus free access to the pelvic cavity is obtained. Then the appendages can be freed or otherwise dealt with, and the uterus can be attached to the anterior abdominal wall. If the adhesions are merely separated, they are almost certain to form again, and the uterus is very liable to resume its retroverted position in spite of the use of pessaries. A case now in Queen ward illustrates this point, and as the clinical history is of considerable interest I will give you a short account of it:—

Mrs. J., aged 29, was first admitted to Queen ward for a tense swelling in the pelvis. She was very ill, with much fever, and in great pain. There was some irregularity of the periods, and other indefinite symptoms of tubal gestation. As the pelvic swelling bulged into the posterior fornix of the vagina, it was decided to open it there. A large quantity of pus was evacuated, and this was followed by a little broken-down blood-clot. A diagnosis of suppurating pelvic hæmatocele, or pyosalpinx, was made. The cavity was drained for several days, and the patient made a rapid recovery.

Some months afterwards she again came under observation for constant pelvic pain and dyspareunia. The uterus was retroverted and could not be fully restored, and pessaries gave no relief. Accordingly she was advised to undergo ventrofixation of the uterus. Laparotomy was performed on March 9th, 1905. To our great surprise the Fallopian tubes were found to be healthy, except for a few fibrous adhesions between them and their ovaries. Nothing remained of the large abscess behind the uterus but a few fibrous bands at the back of the fundus uteri. It was then clear that the original disorder could not have been a pyosalpinx. Even a suppurating hæmatocele did not seem probable, because the ostia and lumina of the tubes were not obstructed. Be that as it may, when the adhesions were separated the uterus and its appendages looked so healthy that it was not considered necessary to remove anything. The uterus was now so easily brought forwards that I thought no ventrofixation was needed.

However, during the next twelve months the retroversion gradually recurred in spite of the use of pessaries, and with it the constant pelvic pain and discomfort. A second abdominal section was therefore done on January 18th, 1906, when we found a different state of affairs. The right tube was closed and converted into a small hydrosalpinx, the ostium being adherent to the

right ovary. The left ovary was now cystic throughout, and, though not enlarged, it was adherent to its broad ligament. Removal of the left appendages was therefore necessary, as well as of the right tube; but the right ovary was merely freed of its adhesions and not removed. The body of the uterus easily came forwards, and was then fixed to the abdominal wall in the manner I will subsequently describe. The future of this case will be of great interest, as so much of her life during the past few years has been that of a chronic invalid. Incidentally I may call attention to one advantage of ventrofixation over other methods of fixing the uterus, viz., the opportunity which it affords of inspecting the uterine appendages, and of dealing with any abnormal state of the parts, or with adhesions which had escaped recognition by clinical examination.

The great majority of my cases of ventrofixation have belonged to the class of retroversion from adhesions as above described. But the operation is also recommended for retroversion when the body of the uterus is very tender and congested, and the pressure of a pessary becomes intolerable. Happily such cases are not common, as the patients are usually of the neurotic type and hypersensitive. Under such circumstances, ventrofixation may give relief by doing away with the necessity of wearing a pessary. Inasmuch as these women are usually neurotic, an immediate cure must not be promised. Indeed, the symptoms will only be relieved gradually by proper attention to the general health and by treatment of the neurasthenia. Two of my series of cases have belonged to this class, and in neither instance has the ultimate result been a conspicuous success. Hence I regard it as the least satisfactory indication for this operation.

By some surgeons this operation is strongly advised for prolapse of the uterus. It should be combined with colporrhaphy and repair of a lacerated perineum or lax vulva, if these exist. When the prolapse cannot be treated with a pessary, then colporrhaphy is usually the next step. By this means a suitable pessary can be worn, and not unfrequently it then gives sufficient relief. No further operation is needed. Sometimes, however, the uterus still comes down owing to the great laxity of its ligaments or the increased weight from chronic enlargement. Ventrofixation should then be advised, especially if the patient is near or beyond the menopause, and thus in no risk of pregnancy. In younger women the matter needs very careful consideration on that account, as we shall see later. One of my cases was very exceptional in this respect. She was a girl 16 years of age, who had begun to work hard when very young as a servant in a lodging-house. She came under observation for complete prolapse of the uterus. For a long time the uterus could be easily returned at night and came down again in the daytime. But latterly it had become so swollen and sore that she could not push it back, and considerable trouble with micturition had arisen. A long period of rest was needed before the parts returned to their natural state. The elasticity of the virgin vagina was gradually recovered, but pessaries would not support the uterus. In this instance ventrofixation was very successful, and the girl was able to earn her living in a more sedentary occupation.

The last indication to which I would refer is the treatment of sterility by ventrofixation. I have no experience of it for this condition, but it is said to have been followed by successful results in cases where the sterility was assumed to be due to retroversion of the uterus. At the Rotunda Hospital the operation is carried out for this object when it is probable that the sterility is due to adhesions about the appendages from mild attacks of perimetritis. As already explained, the opening of the abdomen gives a ready access to the pelvic organs for the separation of adhesions and the restoration of displaced parts. At the same time the abdominal ostia of the tubes can be rendered patent, and thus impregnation may take place.

Details of the operation.—Make a median incision between the umbilicus and pubes, and as short as possible within reason. It can be prolonged downwards if there are difficult adhesions to be dealt with, or other complications. After the appendages have been thoroughly examined and treated where necessary, the body of the uterus is brought up into close apposition with the abdominal wall and kept in position there by gauze pads or rolls tucked down behind it. If the uterus is not kept in position until the sutures are tied, it is possible that a piece of omentum or a loop of bowel may slip in between it and the abdominal wall and become incarcerated. Such an accident is on record. Supposing the body of the uterus does not come easily into apposition with the abdominal wall, then it becomes doubtful whether the case is suitable for ventrofixation. Perhaps intraperitoneal shortening of the round ligaments would be better. For there ought to be no tension upon the uterus, otherwise the patient will have pain and the sutures may cut out.

The method of suturing which I have adopted is as follows: with a curved needle pass a No. 4 silk suture through the cut edge of the rectus sheath, then through the cellular tissues and a fold of the peritoneum; now pick up a loop of uterine tissue from the anterior surface opposite the attachments of the round ligaments, and complete the suture by including the opposite cut edge of the rectus sheath and a fold of the peritoneum on that side. By this means the serous surface of the uterus is brought into close contact with the cellular tissue of the abdominal wall by excluding the edges of the peritoneum. The punctures of entrance and exit in the uterus should be about an inch apart, so as to include a sufficiency of uterine substance. I always use at least two silk sutures, and sometimes three; the third one is passed a little below the first, using that as a guide, while the second is above it. Avoid touching this buried suture with the fingers, either in threading the needle or in tying the knot. It can be tied efficiently with forceps. Before these buried sutures are tied, feel the relations of the parts, and especially note that there is room enough for the bladder. It is not wise to leave a large gap between the back of the bladder and the uterus in its new position; on the other hand, the uterus must not be fastened down too close to the bladder lest it should interfere with its expansion. The operation is completed by closing the abdominal incision. The cut edges of the peritoneum above the position of the uterus are united, and then the muscle, fascia, and integuments are sutured in layers or in mass according to taste.

If there should be any dragging pains during the convalescence, a well-fitting Hodge's pessary may give relief by supporting the uterus. I have not used catgut as the buried suture, because it may absorb too quickly. In a case now under my observation, the operator used a thin catgut suture, with the result that not only the uterus became detached from its moorings, but also the abdominal incision yielded, and the patient now has the added discomfort of a large ventral hernia.

The chief objections raised against this operation have reference to its effects upon subsequent pregnancy. Dr. Russell Andrews found that in a series of nearly 400 cases of pregnancy after ventrofixation, abortion occurred in only 9 per cent., which is considerably less than the average frequency of abortion as compared with labour at term. But there was a somewhat increased liability to transverse presentations, probably owing to the high position of the cervix and its backward direction. Moreover, it cannot be denied that in some of the cases the difficulty in labour at term was so great that Cæsarian section had to be performed. This occurred 21 times in 360 patients, none of whom had any marked contraction of the pelvis or other cause of obstruction. This difficulty seems to be due to want of expansion of the anterior wall of the uterus during gestation owing to its fixity to the abdominal wall. That was certainly the explanation of a case which occurred in Guy's Hospital about two years ago. The woman had been in labour for some days, and when admitted to the hospital the cervix could not be felt. In fact, the cervix was so displaced backwards and upwards above the promontory of the sacrum that it could only be reached with the whole hand in the vagina, and the patient under anæsthesia. As it was quite impossible to apply forceps in that position or to bring down the cervix, Cæsarian section was performed. On opening the abdomen, the true fundus uteri was a little below the level of the umbilicus, and the sac containing the fœtus was really formed by a huge dilatation of the posterior wall of the uterus extending up to the ribs. This sac was incised and the child was removed, and then a small area of the body of the uterus was found closely adherent to the abdominal wall. The operation of ventrofixation had been done some two years previously at another hospital. The area of adhesion was small, and when it had been separated, the fundus uteri sprang up to its proper position much above the umbilicus, like an elastic band under tension. In this manner the uterine cavity was straightened and the cervix came down into place. Indeed, the change was so remarkable that I wondered whether it would have been sufficient to have divided the adhesions, and allowed the labour to end naturally, or at most to have applied forceps after closing the abdominal wound. I was previously rather sceptical of the difficulties in labour attributed to this operation, but the experience of the above-mentioned case has convinced me of their reality. Of my own small series, only one case has become pregnant since the operation, and in that instance labour occurred naturally at term. I have had no opportunity since of examining the patient to discover the present condition of the uterus.

P.S.–The history of the fatal case mentioned above (p. 109) is as follows:—Mrs. H., aged 51 years, six children, youngest 17 years old. For the

last ten years there had been troublesome retroversion, and various pessaries had been tried without success. Latterly there had been much bearing-down pain and the cervix came down to the vulva. Menstruation still continued, and the periods lasted four or five days; they were also becoming more frequent and profuse. The bladder was also very irritable in the daytime. Urine normal.

On examination the uterus was found to be much prolapsed and retroverted. Its body was considerably enlarged and bulged into the hollow of the sacrum, suggesting a fibroid in the posterior wall of the uterus. It was concluded that this tumour rendered the uterus too heavy to be supported by a pessary, and hysterectomy was advised. On opening the abdomen the uterus was found to be generally enlarged (as in chronic hyperplasia), but no definite fibroid tumours could be felt. Ventrofixation was therefore performed, and the uterine appendages were removed to hasten involution of the uterus and stop the menorrhagia.

All went well until the fourteenth day. The stitches had been removed, the wound was healed, and the patient had made a good recovery. There had been no pyrexia, and no thrombosis, or swelling of the legs. The patient had passed a good night and had eaten her breakfast as usual. She was then washed by the Nurse and had been turned on her side as on many previous occasions. Suddenly she exclaimed, "Oh, my heart is going so funny!" The pulse stopped, and she was found to be dead. There was no blueness or dyspnœa as usual in embolism, nor was there any severe pain like angina pectoris. She had never suffered from "heart attacks," nor from phlebitis. Unfortunately no post-mortem examination was permitted; hence the exact cause of death must remain uncertain, but embolism seems the most probable explanation of the tragic event.

Papers by Guy's Men.

A case illustrating the relation of Traumatic Diabetes Insipidus to Glycosuria. By Herbert S. French, M.D. Oxon., M.R.C.P., and C. B. Ticehurst, M.B. Camb.—*Lancet*, March 17th, 1905.

The Factors which Determine the Production of Intraocular Fluid. By E. E. Henderson, F.R.C.S., and E. H. Starling, M.D., F.R.S.—*Proceedings of the Royal Society*, B, vol. 77, 1906.

An Address on the Midwifery of the Present Day. By Peter Horrocks, M.D., F.R.C.P.—*British Medical Journal*, March 10th, 1906.

A Grateful Patient.

The following letter from an Indian patient to the Superintendent of the Hospital after his discharge, has been handed to us for publication:—

Most exalted Sir,

It is with much diffidence, and an entire sense of my own wretched and wholly despicable unworthiness, that I venture to indite this ignominious and vile epistle to your august individuality. I, your base-born bond-servant, would scarce have dared to venture to address you, did not my feebly humble knowledge of your singularly translucent literature recommend me, a poor fool, to rush in where angels fear to tread. I am oppressed by feelings of indeterminate joy and illimitable gratitude; I palpitate with sensations of unsophisticated delight, when I recall the marvellous and miraculous change which my all-too-brief period of repose in your beneficent institution, wrought in my inconsistent constitution. I was admitted by your domiciliary pedagogue, termed among the baser of your high-born ward clerks "the H.P.," and I shall ever recall the illuminating manner in which he investigated the interior of my orbit with feelings of unmixed delight. I was graciously admitted, I reiterate, at the undoubted risk of being considered tautological, to your superb medical ward St.——. I entered it "a sere and yellow leaf," and after the all-too-curtailed period of five weeks, departed from it with benignant sorrow and malignant regret, a hale and hearty Hindoo. Is it marvellous or weird that I should endeavour to convey to you a mediocre modicum of that mellifluous thankfulness which wells up from the innermost recesses of my precordial dulness? I trow not. I am thankful, and am trying to say it. I shall ever remember and recall the stupendous efforts which were made by members of your illustrious staff to gain a true and realistic impression of my miasmatic malady. How one of your most junior members expended upwards of an hour and a half!! of his valuable time inconsequently questioning *me!! poor, miserable worm*, on my past life and that of my reverend and unprecedented ancestors. Should one so high born and magnificent as yourself ever in your gracious condescension confer with him, I should be everlastingly obligated to you (for the second time) if you will inform him that my great-great grandfather-father's side died of Bombonic plague. In a fit of absent-mindedness I inadvertently forgot at the moment of interrogation the precise manner in which *he kicked the bucket*.

Then the vast concourse of united intellectuality accompanying the Medicated Registrar, a man for whom I have the most profound and allegorical respect, was most soothing to my harried nerves. In fact, it enabled me to keep my hair on with equanimity. The grandiloquent verbosity of the moments which I then enjoyed I shall remember with undiluted pleasure. The polysyllabic phrases and hyper-hyphened nouns tripped from his tongue with a graceful *insouciance*, and a

grandiose circumambient magnificence, which I have seldom seen paralleled and never surpassed. By Jove! he *could* spout. The one minim of decinormal acidity in the saccharine nectar which I then quaffed, was that the Medicated Registrar, after much discussion and external cogitation, decided that my malady was merely cholelithiasis, instead of the more awe-inspiring Pseudo-hypertrophic-pulmonary-osteo-arthropathy (I made notes of these terms through the kindness and felicitous precocity of your ward clerk). Then in the sonorous silence of midnight I lay awake in well-nigh beatific somnolence, and vociferously meditated on the mutability of the universe at large and our own mouldy world in particular, till at length, wearied of the circumferential nature of my nocturnal meditations, and without progressing one iota in a centripetal or centrifugal direction, I insensibly transmigrated into the universal Nod. I snored. Then the diurnal routine of the ward came as a balm and a peaceful Elysium to my harassed frame. My cerebral convolutions increased in vigour and excellence, and with the grateful help of innumerable medicinal preparations, prescribed by your domiciliary pedagogue, I at length by a mystic process regained the health and chippiness of my youth. Mere words—collections of symbols of sound—cannot sufficiently definitely express my exuberant thankfulness to your visiting physician. The snow of many winters is upon him, and his tongue protrudes wisdom. His lofty soul-uplifting verbiage was too precipitately deep for my Cimmerian ignorance to follow. His eagle eye alone was sufficiently whetted to discriminate between Hindoo colour purissimus, and Hindoo colour with jaundice. His prolonged dissertation on the point was sublime, and left a deep impress on my carbonaceous memory.

The immortal Rabbi Burns exclaims:

O wad some poo'er the giftie gie us
To see oursel's as ithers see us.

I venture to confidently anticipate you will obtain a fuller and more cataclystic insight into your exceedingly, transcendently, beautiful, beneficent, hospital through the phosphorescent iridescence of my perorative scrawl.

I am,

August and most high-born and egregious Sir,
Yours ever to seven places of decimals,

Change of Address.

Dr. P. N. Vellacott, from Sydenham, Bloemfontein, to 33, Hospital Road, Bloemfontein, O.R.C., S. Africa.

Dr. Ernest L. Ward, from Guy's Hospital to 32, Wellington Street, Merthyr Tydvil.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Obituary.

Charles Edward Steele-Perkins.

We regret to announce the death of Charles Edward Steele-Perkins, M.B. Lond., M.R.C.S. Eng., L.S.A. Lond., on March 7th, at 56, Pennsylvania Road, Exeter, aged 58, a Guy's man, one of a family of Guy's men and of a well-known Devonian family of doctors.

He entered Guy's in 1866; qualified as M.R.C.S. Eng., and L.S.A. Lond., in 1870. In 1872, took honours in the M.B. Examination at the University of London.

He was House-Surgeon and Resident Obstetric at Guy's, and Clinical Assistant at the Children's Hospital, Great Ormond Street.

He started in practice at Sydenham, S.E., being at first in partnership with Dr. Arthur Turner. Here for close on thirty years he had a large practice and was much respected by a large circle of patients and friends.

He was Consulting Physician to the South London Dispensary for Women and Children, and also to the Home and Infirmary for Sick Children, Sydenham, as also Medical Officer to the Sydenham Dispensary.

The death of his only child six years ago, followed by a severe attack of influenza, completely broke down his health, so that he was obliged to retire from practice.

He went to Exeter with his wife and lived with his father until the latter's death, at the age of 87, on March 7th last year.

Dr. Charles Steele-Perkins never regained his health, and after a prolonged and painful illness, extending over eight months, gradually sank and died.

He was one of a numerous family of doctors well known in the West of England, and in Exeter there has been a continuity of the family practice for nearly eighty years. His father, uncle, three brothers, three nephews and a cousin were, or are, members of the medical profession, and were all educated at Guy's. His elder brother, Dr. Alfred Steele-Perkins, carries on the practice of his father, the late Dr. Samuel Steele-Perkins, with his eldest son, Dr. Shirley, whilst his youngest brother, Dr. George Steele-Perkins, is in practice in Wimpole Street. In his younger days at the Hospital he was well known as a good athlete, both on the cinder-track and on the water, and took his place in the Hospital boat. He married Lily, third daughter of the late Mr. Edward Chapman, of Wynnestey, Croydon, and Sydney, New South Wales, who survives him. He leaves no children.

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

Some Cases from the Light Department at Guy's.

By GERALD SICHEL, F.R.C.S.
Surgeon in charge of the Actino-therapeutic Department, Guy's Hospital.

The following cases are recorded in the hope that they may be of useful interest :—

XERODERMIA PIGMENTOSA (Kaposi's Disease).

This case was sent to me for treatment by Sir Cooper Perry, and was afterwards also under the care of Dr. Fawcett in Clinical.

The patient was a girl, aged 16 years, and had had the disease since she was two years old, when she got "sun-burnt"; the "sun-burn" was soon followed by freckles, many of which became deeply pigmented. Besides the freckles, her face was covered with minute scattered scars, a fair number of telangiectasis, and scattered warts. On the left side of the left nostril was situated *a fungating ulcer measuring about* 1½ by 1 inch. This had commenced as a wart some ten weeks before she was first seen on 14th March, 1905. The skin of the whole of the face and neck was markedly affected, also that of the backs of the hands, the extensor (and to a much slighter extent the flexor) surfaces of the upper extremities, and slightly also the upper two-thirds of the legs. The patient held her head in a characteristic way, due apparently to slight photophobia: there were corneal opacities in both eyes, the result of "bad eyes" (probably corneal ulcers), when three years old. Slight vascular pterygium was also present. The scalp was dry and scurfy. The family history was negative. She began treatment with X-rays on 28th March, 1905, at first daily, later every other day. She was given ten minutes sitting, with ·1 to ·15 milliampere in the secondary circuit. She got slight erythema and troublesome itching of hands on 21st April, so treatment was discontinued until 25th April. From May 6th to May 26th treatment was interrupted by an attack of measles. She had seventeen applications of the X-rays to the nose, and eight to the hands before she had the measles. After the measles the X-ray treatment was renewed and applied daily to nose, hands and some warts on face alternately until 16th June, when she was sent home. The X-ray tubes were rather soft ones, the alternative spark-gap varying from 3½ to 1 inch. The amount of current used in the secondary circuit was usually about ·2 milliampre. The tumour on the left nostril entirely disappeared, leaving, however, a rather ragged edge. The vascular pterygium was much relieved, and some of the warts also disappeared. The difficulty in treating her was the wide extent of the disease.

The case was shown at the Dermatological Society of London, on Wednesday, 12th April, 1905. The accompanying photographs, taken by Miss Benton, the Hospital Photographer, give a very correct impression of the progress of the disease, at first without, and afterwards with treatment. (See Figs. 1, 2, 3 and 4.)

Fig. 1.—Kaposi's disease.
14th March, 1905 (when first seen).

EPIDERMOLYSIS BULLOSA.

The patient was a man, aged 31 years, a painter by trade, under the care of Sir Cooper Perry. The disease began when he was two years old; he knows of no cause for it, but there is a history of a fall into dirty water when an infant, after which he had the "blister pock." Family history, negative: he has ten brothers and sisters all healthy. Whenever he knocks himself he gets a bulla, which is sometimes hæmorrhagic. Sometimes the bulla dies away without leaving a sore place, at others a superficial ulcer remains, which results in a scar. In this way he has lost all his nails, and the hands, feet, elbows, knees, face and scalp are cicatrical. He also gets blisters on the mucous membrane of the mouth, and his tongue is bound down so that it cannot be protruded. Over both buttocks the superficial layers of the epidermis are loose, and wrinkled into a net-work of ridges, the appearance somewhat resembling the rind of a wet-melon. The cicatricial alopecia had developed in the last six months before he was first seen at Guy's. There are scattered freckles on the face, and slightly on the backs of the hands. The skin generally is atrophic, being thin and shiny. Dr. French made a differential blood count: polymorphonuclear, 56·4 per cent.; small

lymphocytes, 38 per cent.; large lymphocytes, 4 per cent.; eosinophiles, 1·2 per cent.; basophiles, 0·4 per cent. X-ray treatment did him no good. But the application of a protective covering of collodion seemed to afford some relief locally.

The accompanying photographs give a very fair idea of his condition. (See Figs. 5, 6 and 7.)

Sir Cooper Perry also sent me another case of the same disease in a young boy aged 16, in which high frequency and other electrical treatment absolutely failed to do any good.

MOLLUSCUM FIBROSUM IN CHILDREN.

Two cases of congenital tumours of the fingers in children were sent to the Actino-therapeutic Department for treatment by Mr. Steward.

(1) The patient is a little girl, aged 6 years. She has multiple, hard painless tumours of the skin of the inner three digits of the left hand, which have been there since birth. The largest covers an area about the size of the adult thumb-nail. Hæmorrhagic effusion appears to have taken place into most of the larger tumours, and caused bruise-like discolouration. Many of the tumours have been removed by the knife, and keloid-like scars are left as evidence of previous operations. Epitrochlear and axillary glands not enlarged. There is a slight degree of xerodermia. The tumours microscopically were found to be fibromatous.

Fig. 2.—Kaposi's disease.
23th March, 1905 (when admitted into Guy's and before treatment was commenced).

Fig. 3.—Kaposi's disease.
1st May, 1905.

This case was shown at the Dermatological Society of London on 12th July, 1905, and was recognised by Dr. Whitfield as being of the same nature as a series of cases first reported in the Medico-Chirurgical Transactions:—"On three peculiar cases of Molluscum Fibrosum in children, in which one or more of the following conditions were observed:—Hypertrophy of the gums, enlargement of the ends of the fingers and toes, numerous connective tissue tumours of the scalp and other parts of the surface of the body, with various superficial affections of the skin." By John Murray, M.D. (1873).

Murray thought there were two possible factors, (1) bad hygienic surroundings, (2) parental consanguinity. The three children were sisters and brother. The eldest girl was deaf. The tumours under the microscope were found to be "connective tissue, partly developing into fibrous tissue and partly cartilage." The tumours tended to be symmetrical, and here and there was an ecchymosed appearance. In 1903 there is a further report of these three cases by Drs. Whitfield and Robinson:—The youngest child (a female) had died in the meantime. In the two others the growths had much enlarged. The

deformity of the ears and finger-ends was very marked. Richard, the male patient, died in the Infirmary, and specimens of growth were examined from him and found to be as follows:—"The tumour itself was composed of dense fibrous material, which in some parts showed well-developed fibrous tissue rather rich in cells, while in others it had a hyaline structure with rather large cells, lying in more deeply-stained substance bearing a strong resemblance to cartilage. All the tumours were very vascular."

(2) The second case was recognised by both Mr. Steward and myself as being of the same nature as the first. The patient was a little girl, aged 3 years and 10 months. There were hard, painless, somewhat reddish pearly-looking tumours on the middle and ring fingers of the right hand. They began "like a chilblain" when she was eight months old, and have gradually grown larger. Mr. Steward operated eighteen months ago, and removed a good deal of them, but they have recurred. Her mother has a small lipoma over the right sacro-iliac joint, and also several scattered moles.

In neither of these two cases was there parental consanguinity, and both little girls—who, by the way, although not at all related, were somewhat similar in face,—were if anything above the average intellectual level of their age, and were of a superior class, unlikely to be brought up in bad hygienic surroundings.

FIG. 4.—Kaposi's disease.
June, 1905.

SARCOMATOSIS CUTIS.

This patient was an old agricultural labourer, aged 71, admitted into Stephen, under the care of Sir Cooper Perry, on 9th May, 1905, for multiple swellings of the skin, swollen lymphatic glands and itching. Family history negative. Personal history: he was born in the South of London, had joined the Army at 21, and went

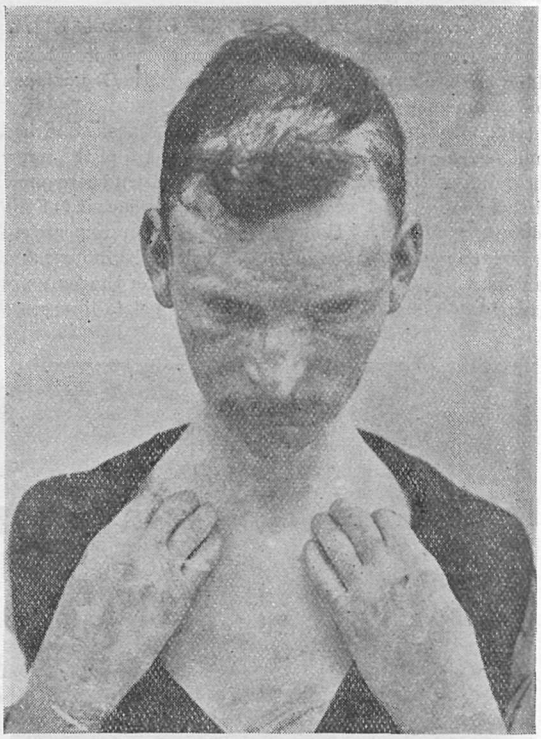

FIG. 5.—Epidermolysis Bullosa.

to India for fourteen years. No history of venereal; accustomed to a fair amount of alcohol. Present disease began about six weeks ago with bullæ on both wrists and both soles; these burst, and bumps appeared in various parts of the body. The patient was a strong healthy-looking old man. He was suffering from a nodular eruption, the smaller nodules being about the size of a split-pea, cutaneous or sub-cutaneous in position, and, except for the greater part of the trunk (which was almost free), being practically universal and symmetrical in distribution. These small nodules were of the same colour as the normal skin. They were best seen and felt in the lower extremities, where the great itching had led to their being scratched, so that many were crowned with a speck of blood. On the face, neck, shoulders, in front of the bends of the elbows, and at the back of both knees, the nodules had run together or enlarged to form

dusky-red, raised brawny areas, with usually well-defined borders, and of varying size. The face was practically covered with such a patch, and the upper well-defined border fairly well corresponded to where the pressure of his hat would come. The scalp itself presented a speckled appearance from numerous minute red spots, which were not raised above the surrounding skin. The patches on the shoulders were most marked on the right side, where there were two well-defined tumours about the area of a florin and half-crown respectively. The axillary, inguinal and left epitrochlear glands were enlarged. The scrotum and penis were covered with red patches. The skin of the palmar surfaces of hands and wrists was rough and scaly, especially over the thenar eminences. The left hand was very œdematous. The patient himself was drowsy, rapidly and constantly falling asleep if undisturbed. Urine, reaction neutral, sp. gr. 1020 : no albumen, sugar, blood or pus.

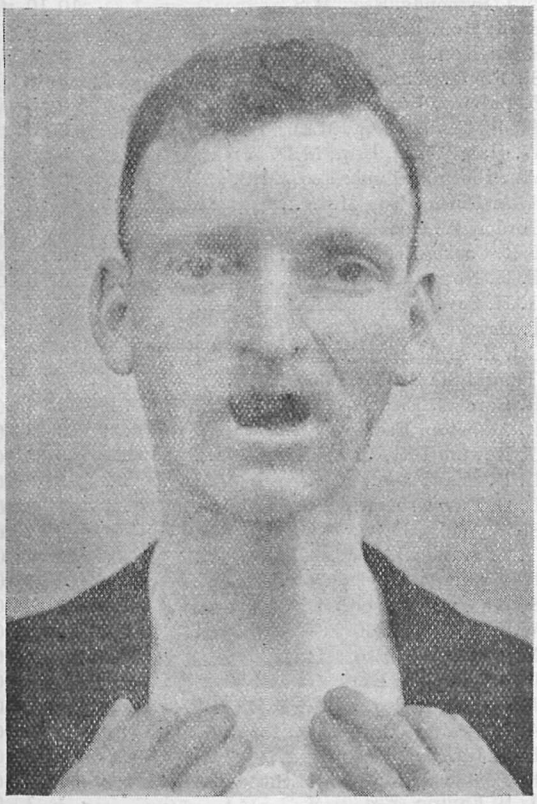

Fig. 6.—Epidermolysis Bullosa

On 13th May, Dr. French made a complete blood examination :—

Red cells	...	78 per cent. or 3.912.000 per c.mm.
Hæmoglobin	...	84 per cent.
Colour index	...	1·08
White cells	...	10.312 per c.mm.

Red cells all excellent in shape and staining; no nucleated red cells seen.

Differential leucocyte count :—

Small lymphocytes	...	46 per cent.
Large lymphocytes	...	6 per cent.
Polymorphonuclear	...	39 per cent.
Coarsely granular eosinophiles	...	9 per cent.
Basophiles	...	0 per cent.
		100

Patient went out of the Hospital on 11th June of his own accord, and did not return.

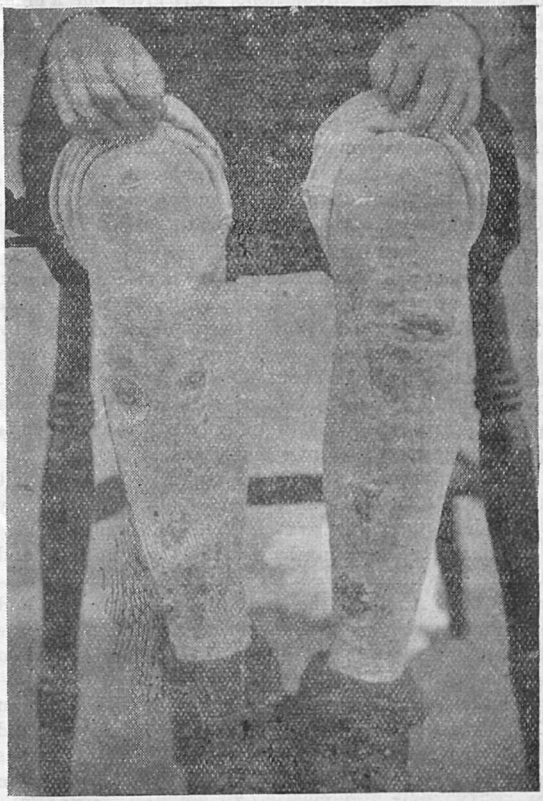

Fig. 7.—Epidermolysis Bullosa.

He had in all thirty-three applications of X-rays, lasting about ten minutes each, to various parts; the tumours decidedly got smaller (one on the right shoulder even disappearing) where the rays were applied; but whilst these were disappearing other fresh spots kept appearing and growing. He was shown at the Dermatological Society of London, on 10th May, 1905.

LUPUS ERYTHEMATOSUS.

The unsatisfactory results of treatment of this disease are only too well known. Neither high frequency or the static breeze, or radium, have given much benefit—in fact in some cases such agencies seem to have been positively harmful.

Lupus erythematosus is held by many to be a tuberculide; *i.e.*, an affection of the skin due to tubercle bacilli toxins. Whether this be so or not, the usual distribution of the disease still remains to be explained. The most common site is, perhaps, the "butterfly" area in the nose and cheeks; this, it may be noted, is also the most usual distribution of the flush of "indigestion," and more or less that of acne rosacea; the next most common form is that which affects the "chilblain" regions; *i.e.*, the parts most likely to suffer from an enfeebled circulation. This gives one a clue. Indigestion—embarrassed heart—lupus erythematosus. To which line of thought the writer has presumed to add Dr. Pye-Smith's dictum, "Why not the obvious?" At all events in the last two cases which have been sent to him for treatment, the following treatment has been pursued, with extremely beneficial results:—

Vibratory massage has been applied locally—and Salol, eight grains to the ounce, three times a day, internally. Ung. Aquæ Rosæ is the only application used.

ENLARGED SPLEENS.

Four such cases have been received in the Department for treatment with X-rays. In only one was benefit derived. Of the three failures, two were accompanied by leucocytosis and one by leucopenia: in all three the hæmoglobin was about 50 per cent. of normal. With regard to the red blood-cells, in one there was polycythemia (12.000.000), in another oligocythemia (2.225.000), and the third about normal (4.850.000).

In all these cases the X-rays appeared to be of not the slightest benefit. The treatments were for very considerable periods, *i.e.*, two, three and seven months.

In one of the cases myelocytosis was well marked, and in this, as well as one of the others, the X-ray applications were made to the ends of the long bones and sternum as well as to the spleen. In all three cases treatment was pushed until it had to be discontinued on account of dermatitis.

The successful case was a woman, aged 41, who was in Mary ward at first under the care of Dr. Bryant, and later under Dr. Hale White. In the ward she was prescribed arsenic and iron. She was admitted in November, 1905, and discharged in January, 1906. She began X-ray treatment on 16th November, 1905, and is still attending as an out-patient.

The red blood-cell count has always been about normal, but under treatment the white cells have fallen from about 290,000 to 10,000. The hæmoglobin count also has steadily increased from 50 per cent. to 70 per cent., and her spleen has been reduced from measuring 14¼ inches by 10½ inches to 8½ by 6 inches.

The applications have been to the spleen for five minutes only at a distance of eight inches from the anticathode. As regards the tube used the alternative spark gap has been about 3 to 4 inches, and the current in the secondary circuit about .2 to .3 milliampre.

The writer must here record his indebtedness to Dr. French and Dr. Bell-Walker (the Medical Registrars), who have most kindly allowed him to use their "blood counts."

WARTS.

A girl of 13 years old, with multiple flat warts on the right side of the forehead, was sent to me by Sir Cooper Perry. The warts completely disappeared after eight treatments with X-rays, lasting 10 minutes each.

Clubs' Union Appeal.

	£	s.	d.
Robert Gordon, Esq.	25	0	0
P. H. Pye-Smith, Esq., M.D., F.R.S. ...	10	10	0
C. H. Golding-Bird, Esq., M.B.	10	10	0
C. J. Symonds, Esq., M.S.	10	10	0
Right Hon. Lord Ashcombe	10	0	0
Right Hon. A. J. Balfour, M.P.	5	5	0
Sir Fredk. Wills, Bart.	5	5	0
C. Barclay, Esq.	5	5	0
Fredk. Taylor, Esq., M.D.	5	5	0
W. Hale White, Esq., M.D.	5	5	0
W. Arbuthnot Lane, Esq., M.S.	5	5	0
L. A. Dunn, Esq., M.S.	5	5	0
Gordon W. Goodhart, Esq.	5	5	0
I. R. Cooke, Esq.	5	5	0
F. H. Norman, Esq.	5	0	0
G. H. Savage, Esq., M.D.	5	0	0
T. Bryant, Esq.	4	4	0
Col. F. A. Lucas	3	3	0
General Sir R. Harrison, G.C.B.	3	3	0
R. Barclay, Esq.	3	3	0
R. Assheton, Esq.	3	3	0
G. Newton Pitt, Esq., M.D.	3	3	0
L. E. Shaw, Esq., M.D.	3	3	0
L. G. Davies, Esq., M.B., B.C.	3	3	0
Sir S. Wilks, Bart., M.D., F.R.S.... ...	2	2	0
G. T. S. Sichel, Esq.	2	2	0
R. Wynne Rouw, Esq.	2	2	0
Sir Thos. Stevenson, M.D.	2	2	0
W. A. Maggs, Esq.	2	2	0
M. F. Hopson, Esq.	2	2	0
P. S. Campkin, Esq.	2	2	0
J. S. Cooper, Esq., M.A., M.B., B.C. ...	2	2	0
A. R. Brailey, Esq., M.C., F.R.C.S. ...	2	2	0
L. J. J. Orpen, Esq.	2	2	0
R. P. Rowlands, Esq., M.S.	1	1	0
T. B. Layton, Esq.	1	1	0
H. C. Cameron, Esq., M.A., M.B., B.C. ...	1	1	0
F. G. Fremantle, Esq., M.Ch., F.R.C.S. ...	1	1	0
R. Felton, Esq., M.B., B.S.	1	1	0
A. M. Webber, Esq., M.S.	1	1	0
A. V. Maybury, Esq., M.B., B.S.	1	1	0
M. G. Louisson, Esq., M.B., B.S.	1	1	0
C. F. L. Leipoldt, Esq.	1	1	0
...	£180	9	0

Pupils' Physical Society.

The eleventh and last meeting of the session was held in the Smoking-room at the College on Saturday, March 10th, 1906, at 8 p.m. Dr. G. Newton Pitt was chairman, and twenty-six members were present. Dr. Pitt announced that two essays had been sent in, in competition for the Treasurer's Prize; that he had been asked by the presidents of the society to adjudicate between them; and that, whilst he thought both were very good, he awarded the prize to the one bearing the motto "Per Mare, per Terras." On opening the sealed envelope bearing this motto, he announced the name of the writer to be Mr. G. Hugh Macalister, whom he called upon to read his essay upon "The Prognostic Significance of Purpura in Children." It is hoped that this will appear in the Gazette in *extenso*. It was discussed by Messrs. E. C. Lowe, Goodhart, Digby, the secretary and the chairman, and Mr. Macalister replied. Dr. Pitt said it was an excellent essay, containing several points new to him, and embodying a larger number of cases and a fuller discussion of them than he knew of in any published book or treatise. He congratulated the writer, to whom a hearty vote of thanks was given by acclamation.

It was then announced from the chair that the sub-committee of the presidents of the society had awarded the society's prize of £10 for the best papers of the session as follows:—

To Mr. G. W. de P. Nicholson, £7 for his paper on "Tumours of the Testicle."

To Mr. C. L. Leipoldt, £3 for his paper on "Suppurative Pylephlebitis."

The prizes for excellence in discussion and for specimens exhibited were not awarded.

The proceedings terminated with a hearty vote of thanks to Dr. Pitt for coming down to take the chair that evening, proposed by Mr. J. S. Cooper, and seconded by Mr. W. M. Mollison. The next meeting will be in October next.

The society is very grateful to the Treasurer of Guy's Hospital for his generosity in annually giving his special prize.

Dental News.

Much satisfaction has been expressed in the Dental School at the election of Mr. E. Barnett as captain of the First Cricket XI.; we extend to him our very hearty congratulations. The position which he has attained in first-class cricket, together with his excellent performances for Guy's in the cup-ties last year, thoroughly justify his appointment, and we trust that, under his guidance, the team will retain the cup for us another year. We could wish that more among the dental men would participate in the hospital games—we are aware there are many who do, and many others also who, though unable actually to play, yet take a lively interest in the doings of the athletic section of the Clubs' Union—particularly, shall we say, on cup-tie days at Richmond! but, alas! there are many more to whom these things are of no import, whose interest at Guy's would seem to spread no further than themselves and their appointments in the Dental School,—how great a service could they render in the allotment of just a little of their time to the common weal of the Union, and how much more justify their claim to the title of Guy's men.

We would like to draw the attention of medical practitioners in South London, particularly old Guy's men, who are in the habit of sending patients up to the Dental Department to have gas for the extraction of, say, one or two teeth. The supply of gas tickets is strictly limited, and they cannot be spared, except when at least five or six teeth are in need of removal, or in very urgent cases; therefore much inconvenience to the authorities and disappointment to patients themselves might be avoided if the nature of this rule (a rule which must be rigidly enforced) were more widely known.

Another matter which has been pointed out over and over again, but which still calls for notice, is the deplorable fact that, day after day, cases of acute alveolar abscess come up to the dental out-patients, which have been treated by hot fomentations externally, which have been applied, not only by outside practitioners, but, "mirabile dictu," in the Front Surgery as well; the scar on the face after incision, which this line of treatment almost invariably leaves behind, can be avoided if these cases be left alone until such time as the tooth can be extracted, when drainage can be established through the tooth socket.

Guy's Physiological Society.

The Society has had some most successful meetings during the term. The following members have read papers:—

Mr. A. A. Greenwood, on Colour Blindness.

Mr. S. R. Perdrau, on Instinct and Reason.

Mr. H. Crump, on Telegony.

Mr. R. A. Rankine, on Carbohydrate Metabolism.

Mr. S. L. Atkinson, on The Ignorance of Science as to the Physical Basis of Life.

The last meeting of the Society was held on Monday, March 19th, when Mr. D. C. Druit read a paper on The Regulation of Respiration. On an average about thirty members have been present at each meeting, and there have been good discussions after each paper. The Society is in every way in a most flourishing condition.

R. A. RANKINE,
Hon. Sec. and Treasurer.

Notes from Paris.

The Morgue.

The Morgue is considered by foreigners to be one of the sights of Paris; nor is this impression denied by the Parisians themselves. Hardly a person passes the open doors but he or she drops in for a moment's thrill at the lugubrious sight within. The late registrar of the Morgue, Clovis Pierre, was a celebrity in his way. He held his post for thirty years, and was known as a wit and a poet. His poems, "Les Gaietés de la Morgue," published by Flammarion, furnish specimens of his style, and for weird humour would be hard to beat. Recently, at the invitation of my kind friend, Dr. Charles Vibert, I had an opportunity of going "behind the scenes" of this celebrated institution, and having the arrangements explained to me. Dr. Vibert, let me say in passing, is one of the leading medical-legists in France and the author of several well-known works on medical jurisprudence. A medical-legist is an expert in medical jurisprudence and confines himself to that subject entirely. In a criminal case in France, it is he who examines the body and expresses his opinion upon the cause of death. In some cases elaborate experiments are made at the scene of the tragedy, and as an example, I may cite the Syveton suicide a year ago, when dogs were asphyxiated in the room in a similar manner to that by which deceased was alleged to have met his death.

* * * * * *

A keen north-east wind is blowing as I emerge from the shadow of Notre Dame, and cross the road to the long low building situated immediately at the back of the cathedral, and hanging almost over the Seine. The tricolor floats from the roof. One enters a passage connecting two doorways. Here, fastened against the walls, are various photographs and notices of unknown bodies waiting recognition, articles of apparel, such as boots, hats, pieces of cloth, false teeth, etc. From the passage I enter the "*Salle d'exposition*" beyond. There are a dozen sightseers already present. The place reminds one curiously of an aquarium. On the further side is a huge glass partition, through which one sees four bodies resting on slate tables, three men and a woman fished out of the river. The woman wears a bonnet tilted on one side; the others simply have their clothes laid over them. A white curtain hangs in the background. The onlookers are thoroughly enjoying the sight of the swollen, discoloured faces; fingers point out peculiarities of facial expression; children standing on tiptoe search for further blotches on the four victims of the Seine. After an inquiry of the "Greffier," I am admitted into the presence of Dr. Vibert, a tall, broad-chested man, with a fine intellectual head, a greyish beard and keen penetrating eyes. After a few remarks, we adjourn to the large room at the rear of the Salle d'exposition, which is very cold. There is no unpleasant odour such as pervaded the place before the introduction of the freezing system. Several plain wooden coffins lie about the floor. Two men in blue overalls are standing in front of what appears to be a series of ovens—eighteen in three rows. Dr. Vibert explains that these form part of the refrigerating apparatus in which the bodies are stored. The three rows are of different temperatures. The top one registers 3° cent. of cold, and the lowest 18° cent. A system of pipes convey the freezing solution from an adjacent room. A door is opened and a coffin is pulled out containing a man's body, which has been there eight days. The attendant hits it with a crowbar. It emits a sound like stone being struck, being practically a block of ice. The features of the body are as fresh as on the first day, and such they will remain for a very long time. Some bodies have been here for upwards of two years—criminal cases awaiting the chance of further revelations. We move to the adjoining room. Two gas engines stand in the middle; pipes pass on all sides; a huge iron cylinder masks the window on the left. In the latter is the freezing solution of sal ammoniac, which is forced by the engines into the refrigerating apparatus next door. We pass back again into the preserving room, and from thence enter another on the right. More freezing receptacles in rows. On the left a huge white curtain moves gently with the inrush of warmer air. The attendant pushes it aside to show the four bodies on the slate tables. Beyond is the glass partition separating the exhibits from the public hall. There is a sudden rush forward of people in anticipation of an addition to the show. The next moment the straining sight-seers sagg down in their places. They only see the muffled-up figure of an old Guy's man in search of "copy" for the Gazette! The white curtain flaps once more into position as we vanish to the rear. The sights of the Morgue are exhausted, Dr. Vibert announces, so we adjourn once more to the private room of the pathologists, where the genial doctor clothes himself in white calico before proceeding to the lecture theatre at one side of the institution. Here I have the pleasure of hearing him give a demonstration on a case of infanticide before a crowded audience of medical men and senior students.

Thus ends my visit to the Morgue.

FREDERIC VICARS, M.D.

Paris, Feb. 9th, 1906.

Papers by Guy's Men.

Case of Eucalyptus Poisoning. By Edgar C. Myott, M.B., B.S. Lond.—*British Medical Journal*, March 10th, 1906.

On 100 Cases of Intercranial Tumour, with special reference to the Ocular Symptoms. By Arthur W. Ormond, F.R.C.S. Eng.—*Lancet*, 17th March, 1906.

A Note on Local Anæsthesia for Cosmetic Operations. By Louis E. Stamm, M.D. Lond., M.R.C.S. Eng.—*Ibid.*

Pulmonary Embolism as Affecting Patients and Doctors. By A. Parkin, M.S., M.D. Lond., F.R.C.S.—*The Clinical Journal*, 21st March, 1906.

Appointments.

House Appointments.

The following appointments have been made by the House Committee on the recommendation of the Medical Committee:—

House Physicians.—Messrs. H. C. Cameron (Dr. Hale White); R. E. French (Sir Cooper Perry).

House Surgeons.—Messrs. A. G. Jones (Mr. Golding-Bird); C. M. Stevenson (Mr. Symonds).

Out-Patient Officers.—Messrs. G. Hamilton, —Knight, W. Reeve, A. V. Maybury.

Assistant House Surgeons.—Messrs. A. Miller (Mr. Dunn); E. M. Harrison (Sir A. Fripp); E. C. Lowe (Mr. Steward); E. B. Smith (Mr. Fagge).

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants.—Messrs. W. P. Purdom, H. A. Watney, G. Cockcroft, L. G. Davies, G. H. K. McAlister, G. W. Nicholson.

Clinical Assistants in Medical Out-Patients.—Messrs. S. K. Poole (Drs. Bryant and Fawcett); M. M. Earle Drs. Shaw and Beddard).

Dressers in the Throat Department.—Messrs. F. B. Lowe, A. W. Eyles, T. B. Layton, J. S. Farnfield.

Surgical Ward Clerks.—Messrs. H. O. Brookhouse, L. Mandel, J. B. Dunning, K. H. Hole, A. E. Lees, P. S. Price, H. A. Sanford, H. E. H. Mitchell.

Assistant Surgeons' Dressers.—Messrs. T. Evans, H. Stott, L. T. Baker, J. F. Young (Mr. Dunn); R. G. Chase, A. W. Ewing, L. K. Edmeades, M. E. Ball, (Sir A. Fripp); C. G. Douglas, L. T. Dean, F. W. Hogarth, A. N. Leeming (Mr. Steward); H. C. Lucey, R. C. V. Edsall, R. P. M. Roberts, C. H. Mills (Mr. Fagge).

Medical Ward Clerks.—Messrs. A. F. W. Denning, H. E. Perkins, F. H. Fuller, C. E. Price, M. K. Nelson, F. J. Cutler, G. F. Syms, H. B. Carter, W. Johnson, E. P. L. Hughes, F. J. Wheeler, E. R. Stone, C. S. E. Wright, D. Allan, J. Walker, W. G. Pinching, J. H. Ryffel.

Post-mortem Clerks.—Messrs. C. A. Basker, W. P. H. Munden, R. J. Reynolds, B. K. Nutman, P. P. Laidlaw (April 1st); St. J. A. M. Tolhurst, S. W. Daw, E. W. Giesen, E. Wragg, H. Joste Smith, R. R. Walker (May 16th).

Clerk in Skin Department.—Mr. S. K. Poole.

Aural Surgeon's Dressers.—Messrs. A. W. Eyles, R. Davies-Colley.

Civil.

Barrionuevo, J. M., B.A., B.Sc. Costa Rica, M.R.C.S., L.R.C.P. Lond., has been appointed House-Surgeon to the San Juan de Dios Hospital, San José, Republic of Costa Rica.

Cann, Francis J. H., M.B. Lond., M.R.C.S., L.R.C.P., has been appointed Admiralty Surgeon and Agent at Dawlish, Devon.

Pollard, G. S., L.R.C.P. Edin., M.R.C.S. Eng., has been appointed District Medical Officer of the Clutton Union.

Read, W. W., M.D. Brux., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Assistant Medical Officer, Shoreditch Parish Infirmary.

Tresidder, W. Elliot, M.B., B.S. Lond., has been appointed Medical Officer for the Chudleigh District by the Newton Abbot (Devon) Board of Guardians.

Vellacott, P. N., M.B. Lond., F.R.C.S. Eng., has been appointed Resident Medical Officer to the National Hospital, Bloemfontein, O.R.C., S. Africa.

Naval and Military.

Fleet Surgeon Robley H. J. Brown, R.N., has been appointed to the *Albion*, on recommissioning.

Fleet Surgeon E. R. D. Fasken, R.N., has been appointed to the *Implacable*.

Staff Surgeon R. F. Clark, R.N., has been appointed to the *President*, additional, for a three months' course at the West London Hospital.

Colonel F. W. Trevor, M.B., R.A.M.C., now serving at Poona, is appointed an Honorary Surgeon to the Viceroy of India.

Major P. Hehir, M.D., I.M.S., Bengal Establishment, has been awarded the medal of the Order of the Hospital of St. John of Jerusalem, conferred for distinguished acts of gallantry in saving life on land at imminent personal risk, for his intrepidity displayed during the earthquake at Dharmsala, on April 4th, 1905.

Capt. P. N. Vellacott having resigned his commission in the S.A.C., has been transferred to the O.R.C. Government Colonial Service.

Civilian Dental Surgeons B. H. Martin and A. Harris have been reappointed for the year from 1st April.

Surgeon-Major and Honorary Surgeon-Lieutenant-Colonel W. C. James, the Honourable Artillery Company of London, is promoted to be Surgeon-Lieutenant-Colonel.

Nurses' Photographic Society.

The Second Exhibition of the Guy's Hospital Nurses' Photographic Society was held in the Nurses' Home on Tuesday, March 20th. There were some 210 entries which were divided into five Classes, there being a special Class for Members who were not able to do the whole of the work themselves. During the afternoon previous to the opening of the Exhibition, the exhibits were judged by Mr. Child Bayley, the Editor of *Photography*, to

whom the thanks of the Society are due for the great care and trouble he took in judging the photographs.

The awards were as follows :—

Class A.—*Landscape, Seascape and River Scenery.*

1st prize. No. 31. "The Patients' Promenade," Miss Smith.
2nd prize. No. 44. "On the River," Miss Traill.
3rd prize. No. 23. "At the Lizard," Miss Oxford.

Class B.—*Portraiture, Figure Studies and Animals.*

1st prize. No. 9. "Sit up Bob," Miss C. Britton.
2nd prize. No. 41. "Horses. Black Forest," Miss Traill.
2nd prize. No. 10. Portrait, Nurse Vance.
3rd prize. No. 32. "Comrades," Miss Smith.

Class C.—*Architecture and Interiors.*

1st prize. No. 19. "The Surgical Building and Colonnade Steps," Miss Smith. This also took the special plaque for the best picture in the Exhibition.
2nd prize. No. 15. Old Window, Cowdray, Miss Scholfield.
3rd prize. No. 28. West Door, Leominster Church, Lady Perry
3rd prize. No. 13. Exeter Cathedral, Nurse M. Adams.

Class D.—*Set of three Postcards.*

Owing to the very few entries in this Class, there was only one award, which was given to Miss Scholfield.

Mr. Child Bayley, in his report, states that "The Exhibition as a whole was quite able to hold its own in point of merit with those of other Societies whose membership was similarly limited. It was particularly satisfactory to find that in so many cases Guy's Hospital itself had been drawn upon for subjects; at the same time, its capabilities in that direction are certainly not exhausted. There is also to be noted an absence, generally speaking, of spots, smears and stains and other untidinesses, which are generally much more prevalent at small exhibitions, and some of the work can be very freely praised for its allround excellence. As the second Exhibition of a young Society, its organisers are certainly to be congratulated."

The awards were placed at the disposal of the judge by the Countess of Bective, Lady Henry Bentinck, Mrs. Cosmo Bonsor and Mrs. Trevelyan Martin.

Committee.—President: The Matron. Vice-President: Miss M. N. Oxford. Sisters' Representative: Sister Naaman. Nurses' Representative: Nurse Jolley. Hon. Secretary: Smith.

Past and Present Nurses' League.

On Tuesday evening last, the Annual Meeting of the Guy's Hospital Past and Present Nurses' League was held in the Nurses' Home, there being about 200 members present. Tea and coffee was served previous to the meeting.

The chair was taken by Miss Traill, the Matron of Guildford Hospital.

The Matron gave a short account of the work of the year, and stated that the Society had been able to pay a sum of £200 off the mortgage on the cottage at Honor Oak Park. There was a small balance in hand, but money would be required during the coming year for the alteration of the cottage, to allow of two extra bedrooms being added. The Matron then proposed a vote of thanks to Mrs. Bryant, the Hon. Treasurer of the League, and said that the League owed a great deal to Mrs. Bryant for the trouble she had taken in getting subscriptions.

A vote of thanks was next proposed by Miss E. Newton, Lady Superintendent of the Nurses' Home, Ipswich, to the Matron, who thanked the members for the kind way in which they had responded to the vote of thanks, and said how much pleasure it gave her to see so many members present that evening.

A vote of thanks was also accorded to Miss Smith, the clerk to the Hon. Sec. and Treasurer, on the proposal of Miss S. A. Hyland, Matron of the Devonshire Hospital, Buxton. Miss Traill, in conclusion, made a short speech, in which she asked the members to take some interest in one or more sections of the League, the Choral Society, the Debating Society, the Swimming Club, Cycling Club, Tennis Club, Library, Orchestra, or Photographic Society.

After the meeting some prize slides, lent by the Royal Photographic Society, were put through the lantern, and brought a most enjoyable evening to a close.

Reviews.

The price of books submitted for review should in every case be stated.

The Diagnosis of Tuberculosis of the Lung. By Dr. K. Teuban, Director of the Sanatorium at Davos, translated by Egbrit C. Morland, M.D. (John Bale, Son and Danielssons, Ltd.) Pp. viii, 135.

The ravages of the disease discussed in this work are so widespread and terribly fatal that any effort made to limit its evil influence is exceedingly welcome. The object of the treatise is to enforce the early recognition of tuberculosis of the lungs, the importance of which the author proceeds to indicate. The writer begins with a discussion on the early diagnosis of tuberculosis, without the finding of tubercle baccili in the sputum, and after giving the conflicting views of all the well-known authorities, pronounces strongly in favour of the view that the finding of bacilli is by no means necessary, and most ably supports his case. He insists on the fact that, as in glands and joints, the disease may proceed a certain extent and then lie dormant for a considerable time, so also in the lungs, and that bacilli are first found in the sputum, when fosi soften and invade a bronchus, *i.e.*, when tuberculosis, till then closed, becomes open.

The symptoms and signs are fully described, as only one with a large experience could describe them; as

points of interest (among many) may be mentioned the monthly rise of temperature in tuberculous women just before the nenstrual period, the pain of a dull boring nature in the shoulder simulating rheumatism, unequal dilatation of the pupils often accompanying tuberculosis of the lungs, and sometimes preceding it by years, and a red or blue line along the margin of the gums, especially seen in children in early closed tuberculosis.

The use of tuberculin is described and strongly defended, and as a point of especial interest is the fact that iodide of potassium may produce a similar local reaction, and be used as a substitute for tuberculin, though not so rsliable in action. The opsonic index of Wright, though of considerable use as a guide to treatment, does not at present offer any help in diagnosis.

Dr. Teuban's classification of tuberculosis of the lung, founded on the extent and severity of the disease, is a sound one, and there being but three classes, is, on account of its simplicity, much to be recommended.

In the third section the author describes in a masterly manner the proper method of examining a patient. Such a precise description is not to be found in text-books, and the importance of such a thorough examination is brought out by the fact that not only a qualitative diagnosis is wanted, but rather a quantitative: this latter fact is, we fear, sometimes rather neglected.

The work from beginning to end is full of interesting facts and details, and will well repay anyone the trouble of studying it.

We congratulate the translator on the way in which he has accomplished his task, as the book makes excellent reading, being printed in large type on good paper. We strongly commend it to the attention of all interested in this most important subject.

Novelties.

Nurses' Requisites.

We have received from Messrs. E. & R. Garrould, 150–160, Edgware Road, a copy of their new and revised Red Cross Catalogue of Nurses' Uniforms and Requisites and Surgical Appliances. This publication is some 70 pages in extent, foolscap size, very comprehensive and exhaustively illustrated. Some of the designs for uniforms and head-dress are very pleasing in effect, and are, we believe, the original and exclusive designs of Messrs. Garrould. Evidently a great deal of care has been exercised in the compilation of the Catalogue, not a thing that is essential to the Nurse has been omitted, and to give even a faint idea of its contents would take several pages of our GAZETTE. Some idea of the position to which the Nursing Profession has arrived is conveyed by the perusal of this list, and the realization of the multitude of items needed in the exercise of the many duties of the qualified Nurses of the present day.

To Nurses and others concerned, we should say that the Red Cross Catalogue is a distinct *sine-qua-non*, and a copy should be in the possession of every member of the Nursing Profession. We dwelt for some time on the beautifully artistic designs for Caps, etc. We understand that Messrs. Garrould have reserved a large section of their extensive establishment for the exclusive use of the members of the Profession, and those visiting Town have a splendid rendezvous in Edgware Road—practically a Ladies' Club—possessing every convenience, absolutely free, and without any obligations whatever.

Sport.

Rugby Football.

GUY'S "A" v. LONDON "A."

INTER-HOSPITAL JUNIOR CUP (FINAL).

This match was played at Chiswick on Tuesday, March 13th. Guy's had M. E. Ball and P. Smith away from the forwards; the former having a bad hand, and the latter being barred from playing owing to having played in the senior final the previous Tuesday.

London won the toss, and took advantage of a very strong wind which was blowing right down the field. Aided by this, they attacked for the greater part of the first half, but Guy's defended very stubbornly and only had their line crossed once, though London also scored a penalty goal.

The second half was disappointing, Guy's, though scoring twice themselves, allowing their opponents also to score twice, and so keep their lead. Still they were handicapped by having Covell rendered of little use through a kick on the head, and the wind also dropped very considerably.

Clarke obtained the first score for Guy's after a good round of passing, and Munden kicked a fine penalty goal. The final score was London 12 points, Guy's 6. Team :—

GUY'S.—P. E. H. Patey (back): W. T. Clarke, C. E. Lloyd, G. C. Covell, T. Lewis-Jones (three-quarter backs); F. Cutler, L. T. Baker (half-backs); L. L. C. Reynolds, W. H. Robinson, C. E. Sprague, D. Stout, E. L. Elliott, M. M. Munden, D. Reynolds, G. B. Cockrem (forwards).

Association Football.

GUY'S v. WESTMINSTER.

INTER-HOSPITAL CUP-TIE (2ND ROUND).

This match was played at Honor Oak Park on February 27th, the ground being in a slippery condition. Guy's won the toss and took advantage of the slight wind, but from the beginning gave a disappointing display, the whole team playing with little or no dash, and the passing being poor. A quarter of an hour had elapsed when Pedrick, following up a good centre from Barker, scored the first goal, and shortly after Witts made a long shot from the right wing which scored. The third goal

was added by Zorab from another good centre by Barker from the left wing, and the same player increased the lead just before half-time by a hard shot at close range, so that Guy's crossed over with 4—0 in their favour.

In the second half Guy's had the best of the game, and Barnett and Zorab added two more points. Westminster, who were playing a man short, after persistent efforts, especially by the left wing, scored shortly before time, and the game ended in favour of Guy's by 6—1.

One cannot congratulate tha team on their display by any means, and it is hoped they will realise their weakness and show more vim and better combination when the Semi-final v. London is played next week, otherwise their chances of success will indeed be slight. Barker, at outside left, sent in some splendid centres. The backs mistimed the ball and kicked rather wildly. The forward line certainly needs rearranging before the next round. Team—

GUY'S.— Wood (goal); Bastard and Robertson (backs); Pedrick, Denning and Wormbold (halves); Berry, Witts, Zorab, Barnett and Barker (forwards).

[This report was not received in time for insertion in the last issue of the GAZETTE.]

GUY'S II. (7) v. LONDON II. (0).

INTER-HOSPITAL JUNIOR CHALLENGE CUP.

These teams met at Honor Oak Park on March 9th. The day was warm and bright, with a high wind blowing down the ground.

Guy's lost the toss and kicked off against the wind. Our opponents obtained possession and made a strong run down our right wing, but Hole cleared.

The ball was now in mid-field. A long kick by the London left-back brought Haycraft out, who cleared well, Boxall and Marsh making a good run down.

A free-kick against us brought the ball back, but once more Boxall and Marsh took it down, but sent behind. After some mid-field play, Mitchell obtained possession well behind the half-way line, and made a splendid run down the wing, but was pushed into touch before he could centre. Shortly after, Boxall received from Marsh, and having gained some ground, passed out to Mitchell, who shot hard. The goal-keeper fisted out, but Eccles was there and banged the ball through—thus scoring our first goal. From the re-start, London pressed, but Hole was in fine form and cleared well. London then forced a corner, but the ball went behind.

From the goal-kick, Townrow obtained possession at midfield, and dribbling past two of the opposition, pushed through two more and shot hard at the goal-keeper, and from the rebound, put the ball into the net. Half-time was now called, with the score 2-0 in our favour.

Playing with the wind behind us, the game became a mere procession. Though the two London backs played a sound game, the combination between our forwards was too good for them. Three minutes from the re-start, Simms received a good centre from Mitchell, and scored. Then Marsh and Boxall scored in rapid succession, thus bringing our total up to 5. Not conten with this, Marsh added a sixth, and Mitchell scored the seventh from a corner kick.

REMARKS.—The forwards play well together, and their pace is distinctly fast. Both wings can centre well, and all the insides can worm their way into the goal mouth. Perhaps a trifle more shoulder-work might be indulged in with advantage. There is never a dearth of halves, and our line eclipsed that of our opponents. Townrow was undoubtedly the best half on the field, but Greene and Edmonds also played really well. Johnson and Hole, at back, are good. The former, though slow, is never found shirking, and can kick a good length; the latter will be watched very carefully. It made one quite comfortable to see him bowl his man over *first* and then kick the ball—in true Cup-tie fashion. Of Haycraft it may be said—

"They also serve who only stand and wait."

Team:—

GUY'S.—Haycraft (goal); K. Hole, Johnson (backs); C. W. Greene, V. Townrow, Edmonds (halves); H. W. Eccles, Simms, W. F. Boxall, Marsh and Mitchell (forwards).

From the Gazette's Special Pathologist.

T. R. A., CHADWELL HEATH.—No tubercle bacilli are found in this specimen of sputum, which contains much muco-pus.

T. R. A., CHADWELL HEATH.—This sputum is muco-purulent in character, but no tubercle bacilli are found.

H. G. A., NOTTINGHAM.—Part of the specimen is an encapsuled adeno-fibroma of the breast, in which there is some proliferation of the epithelium lining the tubules, and part consists of indurated breast tissue, the result of mastitis. We cannot find any evidence of malignancy.

PATHOLOGIST.

Birth.

FRENCH—On March 16th, at 26, St. Thomas's Street, S.E., to Dr. and Mrs. Herbert French, a daughter.

Marriage.

FREMANTLE—CHINNERY.—On July 22nd, 1905, at St. Michael's, Fringford, Francis Edward Fremantle, M.Ch. (Oxon.) F.R.C.S., M.R.C.P., Herts County Medical Officer of Health, eldest son of the Very Rev. the Hon. the Dean of Ripon, to Dorothy, only daughter of H. J. Chinnery, Esq., J.P., of Fringford Manor, Bicester.

Deaths.

MARRIOTT.—On March 20th, at Swaffham, Norfolk, Robert Buchanan Marriott, M.R.C.S. Eng., L.M., L.S.A., aged 75.

STEELE-PERKINS.—On March 7th, at Pennsylvania Road, Exeter, Charles Edward Steele-Perkins, M.B. Lond., M.R.C.S., L.S.A.

EDS.—H. C. C. & C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

THERE have been many improvements brought about during the last few weeks in various parts of the Hospital buildings. The landscape gardening in the park is nearing a finish, and one or two dozen of daffodils are actually blowing within the sacred enclosure, which is still dignified with a notice-board to show that it was originally reserved. A decided improvement is the short cut from the medical school buildings to the medical wards, but the influence of custom is so strong as yet that the majority seem to prefer the old round-about way past the fountain. The conservatory has been removed to the pickle-room side, and the site of the old anatomical theatre is a barren level, which, as yet, shows no vestige of grass, and only the impressions of numerous boots. Another change has been brought about underneath the library windows. This, the favourite working spot of those who found the grandeur of the oaken bookcases too depressing for mental labour, is now transformed into a plot of delved soil, in which the hose-man has been endeavouring to coax sundry bulbous plants to take up their spring residence. So far his efforts have not been strikingly successful, but in due course the bulbs will no doubt follow Topsey's example, and by Prize Day they ought to form one of the attractions of the park.

A distinct improvement is unquestionably the new ward clerk's laboratory, which is slowly nearing completion. It has already received its last but one layer of whitewash and paint, and the shelves and cupboards have been fitted in. It is a trifle smaller than the old laboratory, but is much better lighted and aired, its two large windows overlooking the hop warehouses in Maze Pond. There is a plentiful supply of water laid on in the passage just outside the room, and in the potential fireplace a hot-water apparatus has been fitted. The new laboratory will, therefore, lack the cheery fire which welcomed the early ward clerk in the old clinical lab., just as it will miss the cold dead ashes which invariably roused his ire when he came back two hours later after having gone his rounds with the registrar. The old den was a decidedly cold place to work in, and the centrifuge that wouldn't work, and the grate that refused to draw, were standing objects of execration, the loss of which nobody will regret.

MR. FINNEMORE'S interesting report, of which a condensation appears on another page, will bring home to some of us who have never troubled ourselves very much about the details of hospital expenditure, the magnitude of the work done in the Dispensary. It is a frequent remark of private practitioners, that the man fresh from a large hospital does not realise the

value of the drugs he employs. It is only when we have our own quarterly dispensing bills to meet that the full truth of that remark becomes unpleasantly apparent. The dresser in the Front gaily prescribes whatever he fancies, subject, of course, to the limitations of his pocket pharmacopœia. We need not go so far as to insinuate that in some cases he does not even know the exact composition of the various mixtures and unguents he puts down on his green slip—for after all there is the pharmacopœia to refer to—but few of us would be able to state the exact cost of the mixture when made up, or the total expense to the hospital of our day's prescriptions. It is only in private practice that we learn the full value of our mixtures, and adopt those innocent little wheezes of the general practitioner, to decrease his account with the wholesale chemist. The man who has a large club practice cannot be wasteful of his Pot. Iod.—especially when the Iodine Convention (whatever that may be) has put a fictitious value on the raw material. He learns to prefer chalk to bismuth, because it is cheaper, and, "after all, almost as good," and keeps his original supply of sulpho-carbolate in an impressively labelled bottle on his top shelf—for show.

Nor is Mr. Finnemore's report interesting only in showing the huge expenditure that the Dispensary has to meet. It is instructive since it shows the amount of work done, and the amount of material used. The dispensing department is not overmanned, and those of us who have seen the throng of out-patients waiting to be attended to after 5 p.m. can fully sympathise with the man on late duty whose uninteresting task it is to turn the taps of his mixture cans into so many dozens of variously-shaped bottles. It is difficult to see, however, how his work can be lightened. "An arrangement whereby the whole number of medical and surgical cases should be seen by half-past four in the afternoon" would be ideal. Whether it is practicable or not is another question. That it would have the whole-hearted approval of Out-patient Officer and the Assistant House-surgeon on duty, there can be no doubt; but it would mean an entire rearrangement of the hours of work, and changes in more than one department.

The question of Out-patient treatment is a serious one at all hospitals. No doubt a large number of patients who attend and to whom the Out-patient Officer gives his earnest professional consideration, do so because it is a cheap way of employing their spare time and pouring their troubles into the sympathetic ear of the "doctor." There is the woman who is out of a situation, growing old, seeing spots before her eyes, and demanding a "bottle of strengthening medicine." There is the employe out of employment who suffers from flat feet, which never caused him a moments consideration when he was drawing his wages, and who also imagines that a tonic might be beneficial to his system. We all know them. We start by going over them carefully, testing their knee jerks, and enquiring into their family history—and end by giving them Mist. Acidi. t.d.s. It is good practice; it is eminently useful as experience that will count when we are drudges in a middle class practice, but it tends to become wearisome in the end. From the dispenser's point of view they are wasteful patients, wasteful of time and drugs, but as there is no means of weeding them out they will continue to draw their free, or very cheap supply of strengthening medicine, and come back for more until they have found some more congenital occupation than interviewing the Out-patient Officer, or furnishing the surgeon with a peg on which to hang a string of questions concerning the functions of the calcaneo-scaphoid ligament.

It is a pleasure to record the addition of yet another cup to the treasures of the smoking-room. A great part of the credit for its acquisition is due to the zealous secretary of the Pavy Gymnasium, and the gratification which he must feel in viewing the trophy is doubtless enhanced by the reflection that it needed an extra deal of trouble and hard work to win it. Few of those who witnessed the highly creditable gymnastic and boxing display in the gymnasium ten days ago can have any idea of the amount of trouble and worry which the competition entailed. To begin with, there was a possibility,

up to a few days before the actual contest, that the Inter-Hospital Competition would have to be abandoned owing to an apparent lack of enthusiasm on our part. London was known to have a strong team eager for the display, and it was felt that, under the circumstances, our chances of winning were very slight. There was a difficulty in getting up a team, and when, after much discouragement, one was ultimately collected and a programme arranged, few of us expected that the result of the competition would be so eminently satisfactory as it proved to be. At the last moment one of the team backed out, and the secretary, notwithstanding the fact that he was not on the active list, had to step into the breach. The result of the competition is therefore highly gratifying, and a word of praise is due to all who took part in it, more particularly to the new men who aquitted themselves so well. Now that we possess the cup, let us trust that its presence in the smoking-room will be a continual incentive to men to make a better and more frequent use of the Pavy Gymnasium than they have hitherto done.

The general meeting of the Club's Union a fortnight ago showed that there are still many of us who believe, with Moliere's cook, that a man's stomach is the most sensitive part of his anatomy. More than one member voiced what we believe is a general sentiment amongst those whose custom it is to dine in the college hall, that some radical change is imperative in the catering. Some months ago we had occasion in these columns to draw attention to that feeling, and we hoped at the time that it would be unnecessary at a future occasion to hark back (except, perhaps, in terms of commendation on an improvement which would have been whole-heartedly appreciated) to a subject which is, after all, not an agreeable one to deal with. But it seems, to judge from the opinions expressed at the meeting, that there has been no change for the better in the dining-hall arrangements. It is regrettable in the extreme that there should be any legitimate cause for complaint. That such exists, however, is an undoubted fact. It is a nightly subject of discussion. Members open a conversation with the demerits of the catering as naturally and as indignantly as Sir Edward Clarke's constituents with their representative's sins of omission. The talk may veer round to the prospective appointments, or to interesting items of "shop," but it always wanders back, from medicine to the menu, from surgery to the steaks.

We are none of us budding Brillat-Savarins, and after all the average member does not ask for very much in his bill of fare. What he does demand (and readers of Thackeray will remember that Mr. Brown, in introducing his nephew to the famous "Polyanthus," remarked that it was the privilege of a club member zealously to look after his bodily comforts), is that the food served up should be such that he can unblushingly invite a friend to dine with him. The speechless indignation of the member who perceives a hairpin amidst the gravy of his stewed steak, is, therefore, not only excusable, but perfectly justifiable. We are willing to make every allowance for the authorities, and for the unduly prolonged alterations in the kitchen, but it is high time that some improvement was made.

It is a pity that Mr. Ormond, who explained at some length that the authorities had had great difficulties to contend with, and who even went so far as to make an utterly unjustifiable reflection on the national capability for brewing coffee, did not take the meeting into his confidence and explain that the committee has already, on more than one occasion, considered this question of the catering. There are some of us who believe, honestly enough, that we have the ability to run the club catering on entirely novel and highly original lines, which we flatter ourselves would be eminently profitable. Few men have a grievance without the suggestion for a remedy. But it is one thing to discuss such matters under the stress of righteous indignation; it is quite another to weigh the pros and cons from the responsible point of view of a committee man. Still, it is only fair to let members know that past committees have considered the question, and that they have attended to the alimentary interests of members. It is sincerely to be hoped that there will be no occasion in future for any committee again to consider

the matter seriously. The smoke-room catering is so well and so efficiently carried out, that we are confident that it is possible to manage the dining-room in an equally satisfactory and agreeable manner.

For the last few weeks there has been stuck up on the notice board in the smoking room, a lonely and unappreciated communication concerning the forthcoming Inter-Hospital Boat Race. It is questionable whether any one has taken the announcement seriously. Our Boating Club—which, if we recollect rightly, still continues to exist in the blue book—has long ago ceased to be a matter of interest, and there does not seem to be any chance of reviving it, at least for the present. Yet we think a movement in that direction might be made, even if it were only tentative, to find out what are the opinions of our rowing men on the subject. There must be many among us who are keenly interested in this branch of sport, and it would be a good thing if the belated notice on the smoking room baize board led to some practical result.

From the Gazette's Special Pathologist.

Directions to be followed in sending *Diphtheritic Membrane*:—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. Wells

NOTICES.

J. E., Hoxton.—The peritoneum on these specimens is diffusely infected with colloid carcinoma. The degeneration is so advanced that it is impossible to determine the exact type of cancer, but the ovary shows no traces of growth. Probably the disease has originated in the intestinal tract.

J. E., Middlesborough.—No tubercle bacilli were found in this specimen of sputum, which was comparatively non-purulent in character.

PATHOLOGIST.

A Case of Acute Destructive Arthritis of the Knee-joint.

CLINICAL LECTURE BY Mr. SYMONDS,

January, 1906.

Gentlemen,—A man of 21 came into Job ward a few days ago with acute disease of the knee-joint. He states that ten years ago he had an injury to this knee, and though he has been able to play football and other games, the knee has never looked like the other. It appeared to him larger on the inner side. Eight weeks ago it became painful and within a few days he was laid up. It is impossible to gather whether he had any fever, or whether any general condition preceded the onset of the disease in the knee.

On admission, he was very pale and thin, suffered the greatest pain on movement, and had the most typical starting pains at night, so that his sleep was greatly broken. The joint was flexed and much swollen, especially on the inner side, and here fluctuation was obvious, the skin being thin and discoloured. The leg was somewhat displaced backwards and rotated outwards. The inner condyle of the femur was prominent, suggesting its enlargement. The condition was one of rapid destruction of the articulation, but by what process was not clear. That the ligaments were more or less destroyed, and the cartilages ulcerated, the acute suffering when he moved, and on the involuntary movement at night, sufficiently indicated. He could hardly bear the slightest touch. The case looked like one of advanced tuberculous disease, but eight weeks seemed all too short a time for such extensive destruction. Therefore, a septic origin was looked for, and first that due to the gonococcus suggested itself. We dismissed this at once, for the lad was of a superior class, of refined thought, and would have at once reported this condition had it existed. Moreover, the joint was unlike any case of gonorrhœal infection that I have ever seen. Even the most acute varieties do not give rise to so much destruction, nor indeed have I ever seen the formation of pus in the most acute varieties. Another point against this view was the absence of the characteristic suddenness of onset, so typical of the acute articular variety of gonorrhœal synovitis. For example, a man, driving his horse at three o'clock in the afternoon, had a sudden pain in his wrist and dropped his whip. Swelling and redness very soon appeared. When he applied

for relief, he was sent in for acute suppuration of the joint. The skin was of the deep dark red colour, and somewhat shiny, almost characteristic of gonorrhœal infection. There was also marked œdema and great pain. No history of gonorrhœa could be obtained, but in a few days we had evidence of a purulent urethritis, and found that it had existed some weeks. Being well aware that these joints never suppurate, a plaster of Paris splint was applied with instant relief, and he recovered, as all these cases do, with a stiff joint. In passing, let me say that a plaster of Paris splint, made according to the method of Croft, is the only appliance that gives relief; it is superior to all forms of local sedatives and other splints. Such a case, typical of its class, presents so great a contrast both in onset and in progress to the one under discussion, that we may dismiss the gonococcus.

The pneumococcus is a more destructive organism. We had in Job ward last year a man of 57 with destruction of one knee and one elbow, so far as could be made out from this cause. He gave a history of pneumonia, and told us that he had been treated at home a long time for this affection. He was a man in better circumstances than most of the patients, and more reliance could be placed on the account of his illness. When admitted, both joints were suppurating from several sinuses. From the elbow, the whole of the lower end of the humerus was removed as a sequestrum. The knee, subsequently excised, and with success, showed suppuration only, the bones being healthy. This, then, is a variety of infection sufficiently destructive to explain the present case. But we have no history of pneumonia.

One other cause said to determine acute infective arthritis is influenza. I have lately encountered the following case. A young man was taken ill, with general pains in the bones and joints, and a high temperature. With the subsidence of the general symptoms, in a few days, the left knee became painful and swollen. Steadily it grew worse, and the progress was accompanied with great pain and some pyrexia. When I saw him, the most peculiar feature was a large swelling in the popliteal space, over which the skin was red and thin—it was in fact on the point of bursting. The joint was distended with fluid, and fluctuation could be obtained from one side to the other. Here was a case of acute synovitis, with a semimembranosus bursa sharing in the infection, and causing the popliteal swelling. The joint was very painful so that he could hardly bear any movement. The temperature had been raised throughout the illness which had now lasted ten days. There was no gonococcus infection, no pneumonia, and but a brief general illness preceding the articular pain. For want of a better explanation we called this influenza. For another explanation I refer you to a later part of this lecture. The popliteal swelling on being incised gave vent to a thin sero-pus, and the joint emptied its contents at the same time. An opening was then made above the patella into the joint, and the cavity flushed, first with boiled water, then with a mild solution of perchloride of mercury (1–4000); then the strength was raised to 1–500 by degrees, and then reduced back to plain boiled water. By means of a large silver catheter, all parts of the joints were reached. Then the opening into the joint was closed with sutures. The skin in the popliteal space was so much injured that the edges of the incision gaped widely and could not be sutured. A gauze pad was laid over the opening, and the knee put up in a splint. Had the skin been sound I would have adopted a similar dressing, finding it better than closure. After some few weeks a plaster splint was applied. During all this time the man had much pain, laid in one position, and had an evening temperature of 100–101°. He indeed showed all the signs of a vascularising synovitis, and I was obliged to give a grave prognosis as regarded the future usefulness of the joint. In the end, however, recovery of movement was complete, and he was able to resume his duties as a naval officer. Had a drain been employed in the joint, or continuous irrigation, ankylosis would, I believe, have been inevitable. I have incised pyæmic joints freely, and without inserting drains, and obtained complete movement and rapid recovery. I have come to the conclusion, after much experience, that if flushing be conducted in the way I have described above, and drains be dispensed with, the septic joint will have the best chance of recovery. For example: Ten or twelve years ago I had the misfortune to have a case of pyæmia, following removal of a cervical gland. The rigors and pyrexia were most typical, and the danger to life terrific. The right knee became infected, and after much persuasion I was allowed to open it. The incision was made in the middle line above the patella, and the joint flushed out. The wound was left open and covered with gauze, and a plaster of Paris splint applied. Within a few days the right shoulder became infected, and was treated at once in the same way. The patient recovered rapidly, and both these joints retain their full movements.

Using these examples of septic arthritis to throw light upon the present case, we must acknowledge that the diagnosis is not rendered any easier, for the history does not accord with any of them. The absence of a general illness compels us to accept a primary arthritis, and, if so, we are driven back on tubercle. But here I must repeat that the rapidity is opposed to this view. Is there any other explanation possible? Can some general condition exist, giving no obvious clinical signs, and which yet might be the determining cause of an acute solitary arthritis? The nearest parallel is the acute periostitis of children. The correct explanation of this affection was given many years ago by Cheveau, of Lyons. In France young rams are unsexed by torsion of the spermatic cord. It happened that Cheveau was asked to investigate the cause of sloughing of the cord, and the death of the animals, that had occurred in a certain district. He suspected that the animals were toxic before operation, probably from feeding on infected materials. Cheveau therefore instituted the following experiment: Into six animals he injected a septic infusion sufficient to determine a smart reaction, but not enough to prove fatal or determine local phlegmon. A second series, after a similar injection, were submitted to torsion of the cord (bistournage). In all these sloughing took place. In another series, not injected, torsion was not attended with evil consequences. The conclusion was therefore arrived at, that injury to a part involving rupture of the vessels, will determine a phlegmon when a septic poison exists in the circulation. So long as the toxic material was confined by the endothelial lining of the vessels, the animal was safe, but when the vessels were ruptured, the infective material escaping into the tissues gave rise to local phlegmon, and a general infection. Is it not possible that an unnoticed, and even trivial injury, may have in this way liberated infective material into the capsule of the knee?

Possibly this is the true explanation of the case I have described above as one of influenza: *i.e.*, that the infective material circulating in the system is harmless beyond the production of a general pyrexial state, until it is liberated from the guardianship of the endothelium, and is deposited in the connective tissue. When this pyrexia state exists the slightest injury may determine a phlegmon. I have seen an injury that was not more than the strain of a muscular fibre, determine a terrific phlegmon followed by general illness Yet the infection of the finger had been so slight, as to leave, when this complication happened — twenty-four hours after infection—no mark whatever.

Septic poison must often enter by the throat or other part of the alimentary canal. Certain it is, that we cannot discover in many cases of acute necrosis any primary lesion, and yet the septic material must have gained access through some broken surface, leaving no evidence of its point of entry. In support of such a view, one may recall the "acute bubo." It is due to a local venereal infection, so rapidly absorbed into the glands, as to leave no mark. These cases are common enough.

A more severe infection may escape the glands or enter directly the blood stream. There came under my care some years ago one of the men employed in the post-mortem room. There was a history that a few days before he had scratched his finger. This was not followed by any swelling or pain. The man, when admitted, was desperately ill with true "blood poisoning." The pulse was rapid, the temperature high, he was breathing rapidly, his face was flushed, and he had the stupor of profound toxæmia. The most minute examination failed to detect a lesion of any kind. No pustule on the finger indicated the site of absorption. There were no enlarged glands, no lymphatic vessels, no pneumonia. In five days he died comatose. Twenty-four hours before the end there appeared an extensive phlegmon over the right side of the chest-wall, entering into the axilla. This was the side of infection, but the phlegmon did not begin in the glands. An injury as slight as this might well be overlooked, especially when it is not expected and guarded against, as it is in those engaged as was this man.

Typhoid infection need only be mentioned in support of infection by the alimentary track. If this, why not other poisons? In a recent epidemic due to milk, in the north of London, I was asked to see a man, with suppuration of the knee, of the most extensive kind. An incision let out a large amount of pus, without, however, arresting a fatal issue. This man's illness, like many of the others, began with swelling of the submaxillary and cervical glands. Some of the cases got well, others had septic pneumonia and died, and this man had with his general pyæmic state, acute suppuration of the knee. When well-marked infection takes place as in such an epidemic as this, no difficulty arises in tracing the avenue by which the poison enters.

Putting together the well-established fact of septic infection through the alimentary canal, and the cases of general infection through the

skin, without noticeable or persistent lesion, it is fair to conclude that a general systematic infection may arise through a lesion of the mucous membrane, having no local evidence at the point of entry. In this way the present case may be explained, and would then compare with the periostitis of children.

Returning to the consideration of the local condition of the knee, let me call your attention to the prominence of the internal condyle. The bone appears to be enlarged, in fact all of you, I expect, will say that it is substantially larger than normal. This prominence is noticed in all cases of advanced disease of the knee, especially in tubercle, and it is spoken of as "expansion." In fact, however, the condyle, so far as regards its transverse measurement is normal. In tuberculous osteitis the whole interior may be destroyed, and yet the external shell of bone remains unaltered. Though apparently greatly enlarged in the present case, you will find it quite normal when cut across. If you will follow such cases to the operating theatre, you will learn that truth. Joint disease leads to enlargement of the articular ends; when suppuration has occurred, and sinuses have existed for a long time, it requires months. Then the periosteum becomes affected, and lays down new bone close up to the articular margin. Such specimens you will find in the museum. The apparent enlargement is due to several causes, and first to the extensive wasting of the thigh, throwing the condyle into prominence. You remember that it is the more prominent condyle of the two. That the outward rotation, and backward displacement, throw this condyle into prominence, while the external is concealed by the projecting outer tuberosity of the tibia. If there be added in tuberculous cases some thickening of capsule, the prominence is explained. Certain it is, that in the many opportunities one has had of examining the bones after excision of this joint, enlargement has not been present. You can prove this clinically by taking the transverse measurement by calipers. In hip joint disease you will notice in the same way, marked prominence, and apparent thickening of the great trochanter. Here again the bone is not increased in size, and indeed will be found quite normal on section. Let me ask you to examine some specimen in the museum in proof of this explanation, viz., 1329[61], 1318[30].

Until the joint is opened, it will be difficult to be more exact, and we must leave the diagnosis between an acute infective arthritis, and a tuberculous infection of a very acute and destructive kind. If the former, we shall find the pus thin and sanguineous, the capsule injected, the cartilage thinned from surface proliferation, and marked with shallow grooves. The method of removal of cartilage in a septic synovitis, is characteristic and easily recognised. Take this specimen 1329[66] and 1326[75], and note the sinuses grooves in the cartilage, and the exposure of bone by proliferative destruction of the cartilage from the surface. Note the absence of granulation tissue and of vascularity. If tuberculous, the pus will be thicker, the synovial membrane thickened with a pale granulomatous formation, the cartilage will be destroyed from both aspects, and in this case separated in places from the bone, the bone itself being covered with granulations. The destruction of the cartilage proceeds, first, from the surface by the invasion of the vascular synovial membrane; next, it is separated in flakes from the bone.

To sum up, we have clinically a case of destructive disease of the joint, without any sign of repair. The patient is young, an age at which repair is active. In acute septic disease, limited to one joint, we expect earlier signs of organisation than in tubercle. The very absence of any attempt at recovery is in this case in favour of an acute tuberculous process, attended with rapid and early suppuration.

The choice of treatment lies between amputation and excision. If it prove to be a septic condition, is excision contra-indicated? I mean particularly in the presence of a progressive disease, with free suppuration. Is there a danger of infection spreading to the medulla and setting up osteo-myelitis?

As an answer, I will refer you to the case of the man mentioned earlier in this lecture, with suppuration of the knee, following infection from the pneumococcus. Though fifty-seven, and much enfeebled, and though there were several sinuses, he made a rapid recovery, and I will show him to you on Friday next in good health. I think a safe position to take up with regard to this question is this: While there is general systemic infection excision must not be contemplated. But when the joint is the only remaining lesion, and the general condition has settled down, excision may be safely undertaken. Whether it is wise to wait for such a termination, is a question apart from the present position. I am considering the question as we see it in this man, or as existed in the pneumococcus case, *i.e.*, where systemic infection has subsided. We may find that there is already osteo-myelitis of the condyles, as in the elbow

of the old man just referred to. Then amputation must be performed.

If the joints prove to be tuberculous, which operation ought to be selected? Though much reduced by illness, the patient is young, and ought to bear excision well. The whole of the synovial membranes must be removed, and even if there be deposits in the bone, these, if limited, may be excised. I propose, therefore, to lay open the joint as for excision, and to be guided by the pathological condition found.

The joint was excised on January 22nd, 1906. On entering the joint bright vascular congestion was the principal feature. The extreme bright congestion of the crucial ligaments was particularly marked. The pus that escaped was thin. There was none of the usual turbid pus seen in tubercle. The supra-patellar capsule was thicker than one would expect to find in acute septic arthritis, and more resembled the condition found in tubercle. The cartilage over the condyles of the femur was separated in large flakes, and that part which remained attached was moveable as on a bed of granulations. This form of separation of the cartilage, I have not, as stated above, seen in active infective disease, but only in tuberculosis. The appearances therefore, on the whole, were more like an acute tuberculosis, beginning as a primary articular ostitis. We were obliged to suspend judgment until the microscopic examination had been made, and this revealed the definite appearances of tubercle. We must, therefore, look upon the case as an unusual example of acute tuberculosis. Where it exactly began is difficult to say, but the short clinical history, and very great pain, would seem to point to its beginning in the articular surface. If not beginning here it must have very early invaded this region. When the condyles were cut across they were found to be perfectly normal in transverse diameter, justifying the interpretation set upon the apparent enlargement in the commencement of this record.

Pass List.

University of Cambridge, March, 1906.

DEGREE OF M.B. CONFERRED.

R. F. French.

The first Successful Nephrectomy performed in Guy's Hospital.

A short time ago Nurse Sauer, of Newhaven, who now holds the licence of The Obstetrical Society (L.O.S.), brought her husband into Lazarus Ward to be under Mr. Lucas's care for ulcer of the stomach, which had been explored by him through a laparatomy incision some two or three years before. She related how she had nursed the first successful Nephrectomy operation case performed in Guy's Hospital, and she looked back with pride to the aid she had rendered on that important occasion. The operation was performed by Mr. Lucas on February 17th, 1880.*

At that time the Hospital was convulsed by what old Guy's men, of twenty-five years' standing, will remember as the great Guy's Nursing Disturbance. Owing to the rigour and lack of tact with which certain necessary reforms were enforced by an able but injudicious matron, some eighty nurses resigned in three months. An angry controversy arose between the Governors and Staff. The newly-appointed Sisters and Nurses acted, in many cases, in a manner antagonistic both to the students and their teachers. A general feeling of distrust existed which interfered greatly with the proper treatment of patients. It was whilst this unhappy disagreement was at its height that a patient was admitted under Mr. Clement Lucas's care suffering from tubercular disease of one kidney and a discharging urinary sinus in the loin. This case Mr. Lucas thought an appropriate one for the removal of the kidney by lumbar Nephrectomy. Arrangements had been made for the performance of the operation in Philip private room, when Dr. Steele, the Medical Superintendent, waited on Mr. Lucas and informed him that it had been reported to the Governors that he was about to perform an unjustifiable operation, and that they refused to allow it to be done. Mr. Lucas maintained that it was a question between himself and his patient, in which the Governors had no right to interfere. If the surgeon thought it right and the patient desired to submit himself to the risk of the operation, how could persons untrained in the profession judge between them? On the part of the Governors it should, how-

* This case is fully reported in the Transactions of the International Medical Congress, held in London, 1881.

ever, be mentioned that Mr. Durham had removed a healthy moveable kidney from a young woman a few years before, and that the case had terminated fatally a day or two after the operation.

Mr. Lucas proceeded to carry the operation through, and it is probably the only operation ever performed in Guy's Hospital at which the Superintendent has been instructed to be present to watch the operation on the part of the Governors, and immediately to report the result. Not satisfied with this, the Treasurer himself visited the patient as early as 9 a.m. the next morning to see if the man were still alive. Those who have experience in this operation will know that these suppurating tubercular kidneys are the most difficult of all to remove, being adherent to every structure in the neighbourhood. The operation was a tedious one, and the convalescence interrupted by accidents, but eventually the patient made a complete recovery, largely owing to the devotion of the dressers and nurses, who knew that their surgeon had staked everything on the result of this case. Mr. Couling of Brighton, than whom no truer Guy's man ever lived, assisted in completing the result by giving the patient the benefit of Brighton air in the County Hospital during the healing process.

A few years later there was a discussion at the Clinical Society on Nephrectomy, when Lord Lister (then Sir Joseph Lister) was in the chair, and in the course of the debate Mr. Lucas mentioned that his patient was still living in good health, and that he had lately been to the hospital to report himself, and was very proud of having recently become the father of a fine boy. A member of the Society, who dearly loved a joke, rose and said he presumed the only evidence Mr. Lucas had that his patient was the father of the child was that the patient's wife was the mother of another child, which was quite a different thing. There was a general titter at this sally from a recognised joker. Mr. Lucas rose to reply, and said it was quite true that the only evidence of the paternity of the child was his patient's word, which he had no reason to doubt, but if the member who had spoken knew better who was the father of the child, he (Mr. Lucas) would accept his word rather than that of his patient. For a moment there was a dead silence, but when the meeting had grasped the situation it broke out into a roar of laughter. Lord Lister's face at this time was a study to watch; his effort to keep his composure and to preserve the dignity of the chair, and his doubt as to whether he ought to interfere, were all shown on his expressive countenance. But no one spoke again, and he hurriedly called on the next reader of a paper.

A Medley.

On taking the punt to Henley, 1903 Floods.

I.

The day is dark and the clouds are low,
As we face the sweeping stream;
With a bold resolve to "punt" or "tow,"
Though rain may threaten and gales may blow,
And of sun we may catch no gleam.

II.

Then to the bank in haste we fling,
When the punt pole snaps in two
And on hands and knees we crawl and cling,
To a tow line taut as a fiddle string,
'Neath a sky of leaden hue.

III.

But "here's to" the pull of the tearing flood,
And "here's to" the wide thrown sluices;
And "here's to" the splashing slip and thud,
Of men who are plodding through tow-path mud
With persistence akin to King Bruce's.

IV.

For what care we about fret or pule,
Let others despond and be dreary;
The man is a fool, who cannot rule
His spirits above the wind and the pool,
And keep up a heart that is cheery.

E. L. V.

Clubs' Union Appeal.

(Received up to Friday, April 6th, 1906).

	£	s.	d.
Amount previously acknowledged ...	180	9	0
Dr. C. Edmund Aikin	5	5	0
Sir Alfred Fripp, C.V.O., C.B., M.S. ...	5	5	0
R. Clement Lucas, Esq., B.S.	5	5	0
J. H. Targett, Esq., M.S.	2	2	0
J. Lewin Payne, Esq., ...	2	2	0
H. Hunter Carter, Esq., M.B.	1	1	0
E. L. R. Norton, Esq.	1	1	0
E. Clifford Beale, Esq., M.A., M.B., F.R.C.P.	1	1	0
W. M. Mollison, Esq., M.B., B.C	1	1	0
	£204	12	0

The Year's Work.

The Dispensary and Pharmaceutical Laboratory.

The annual report of the Hospital Pharmacist, which has just been issued, is interesting enough to read and instructive enough to consider. As it is too long to be given in extenso, we abstract the following more generally interesting details from it.

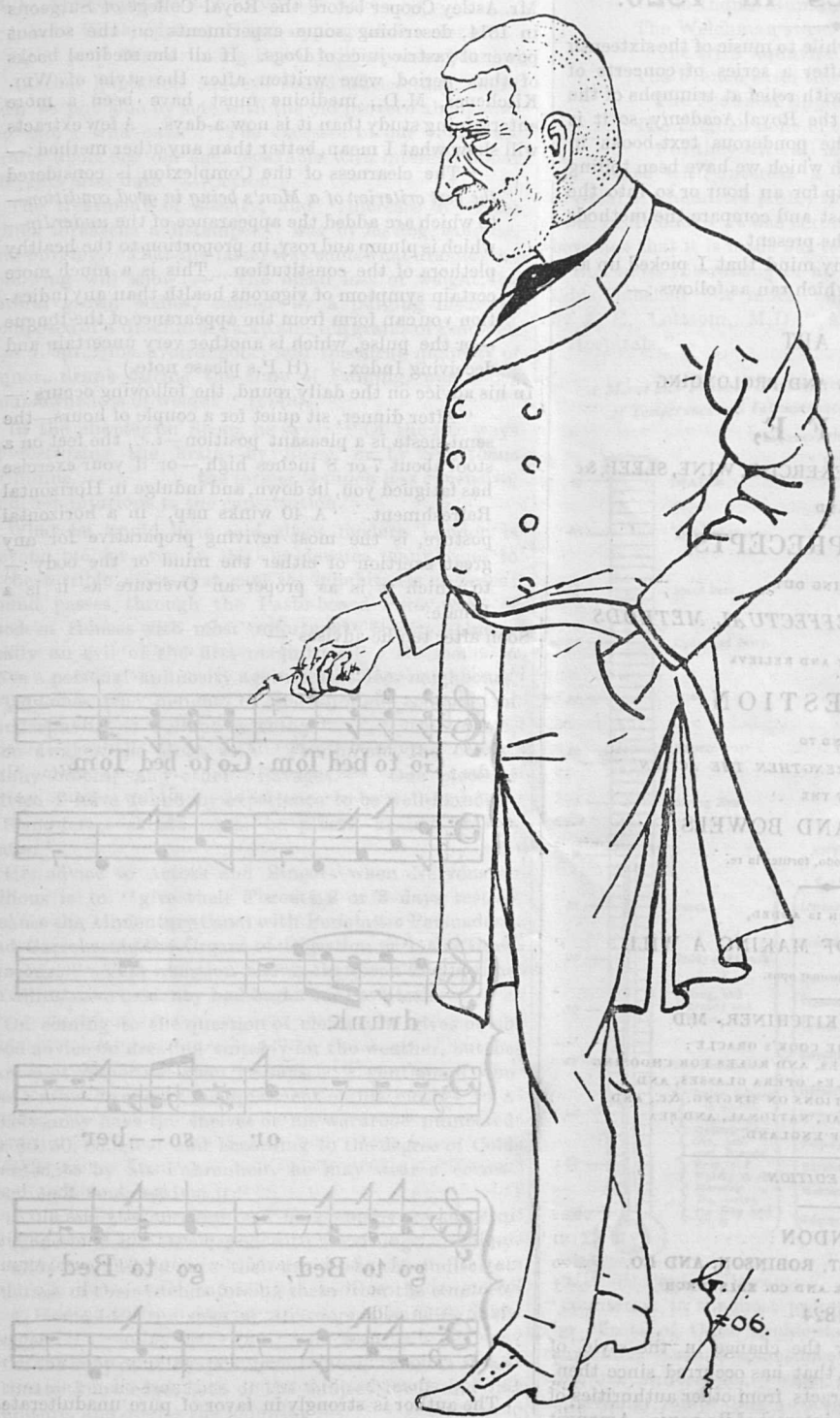
The total number of dispensary attendances by Out-Patients during the past year was 199,974 against 191,672 in 1904, and 188,871 in 1903, a net increase upon the number during 1904 of 8,302. The classified list shows that there were 75,196 medical to 33,265 surgical Out-patients who attended at the dispensary, the rest of the attendances being casuals and "free-all classes," It is interesting to notice that this last class, those, that is, who are too poor to pay even the merely nominal sum that the dispensary charges, numbered 29,656, an increase of almost 6,000 on the number of free patients during the previous year. It can easily be seen that this large number of attendances has made the work of the dispensary officials increasingly hard. On an average about 630 patients were attended to every day and of these "over 100, or from 16 to 20 per cent. came to the dispensary after 5 p.m." As Mr. Finnemore says, "This entails a great strain on the dispensers on late duty, and there is felt the want of some arrangement whereby the whole number of medical and surgical cases should be seen by 4.30 or 5 p.m. The man on late duty would then have only the casual cases from the Front Surgery (about 50 to 60 after 5 p.m.) and the dispensing for urgent cases in the wards." During the year the Dispensary received £2,421 14s. 6d. as against £2,414 6s. 11d. in 1904, the most interesting feature in the credit account being the remarkably low sum collected in the Front Surgery boxes. In 1904 the inherent gratitude of those who had the misfortune to require treatment at the hands of the Front Surgery officers showed itself in a tangible way by means of box contributions which totalled £5 odd; last year these contributions had dwindled down to an insignificant four shillings.

It is interesting, also, to turn to the debit account, the details of expenditure and cost. Drugs accounted for £3,078, while Dressings totalled £3,125—tall figures indeed but very satisfactory in a way for they mean a net decrease of £635 on the expenses during the previous year. Coming to other items of expenditure we find that Antiseptics cost £368 odd (a net decrease of about £2 on the sum spent in 1904). Lysol, about which we have had our say in "Passim," cost us £161; the Carbolic Acid bill amounted to £109, while the much cheaper Formaline, of which we used more than 570 lbs., only cost £14. Chinosol, which has slightly decreased in price, accounted for some £3 odd. In 1904 the Hospital used only one pound of Glutol, last year it wanted four pounds, and as Glutol is, comparitively speaking, a millionaire's antiseptic, that small quantity ran away with £5. A rather interesting detail is the increase in the consumption of Hydrogen Peroxide, of which almost four times the quantity usually taken was purchased and used last year. It would be interesting to find how it compares as an antiseptic with other and more commonly used solutions, but it is cheap and apparently highly popular.

Coming to Anæsthetics, there has been a saving of nearly £80 upon the amount spent on this item in 1904. Ether cost £51 7s. 1d.; Alcohol only £35. "The reason for the decreased amount of Alcohol (absolute) bought" says the Pharmacist, "is that the Medical School no longer uses so much of this, owing to permission obtained to use duty free spirit. Chloroform is lower in price than it has ever been; Ethyl Chloride has largely come into general use, and consequently the price has fallen; Somnoform has entirely fallen into disuse—the usual fate of expensive specialities. It is interesting to note that in 1902 the cost of Nitrous Oxide was £46. This substance has almost been supplanted by Ethyl Chloride, and the cost of the substances used for the production of temporary Anæsthesia has this year fallen to its normal value, about £50."

The dressing bill shows a net decrease of £360 "due to some extent to the slightly lower price of cotton." Grey bandages have increased (from 593 gross in 1904 to 819 gross last year)." There are a few items in the dressing bill which might puzzle some of us. How many ward clerks are there who would be able to tell the difference between "Robinson's Dressing," "Cellulose Wadding" and "Compressed Moss," of all of which nearly three hundredweight was used during the year. Roughly about sixty miles of Cyanide and Iodoform gauze were used, and almost five miles of bandage cloth.

Equally interesting and striking are the figures in the drug list. Potassium Iodide, which stood at 12s 11d. per lb. "owing to the fictitious value put on the Iodine by the Iodine Convention," was bought "from hand to mouth," and finally only one hundredweight was bought at a slightly lower price, resulting in a saving of almost £27. We used 9 tons of extract of malt, costing £256. "This quantity is far in excess of that given away in any other large London hospital, and the question might be considered whether its use for casuals should continue to be permitted, or whether some cheap substitute of similar chemical composition, *e.g.*, glucose or golden syrup, could not be used." In 1901 our alcohol bill was over £500; in 1905, 250 gallons were used, costing £245. This decrease is accounted for by the fact that less tinctures have been used and consequently less alcohol employed, and the Pharmacist points out that the bill may still further be decreased, by about £30 per annum, by omitting rectified spirit from Mist. Acidi. Co., to which it is added as a preservative. During the past year the dispensary gave out 4,000 gallons of lotions, 10,800 gallons of mixtures, 380 gallons of tinctures, 48 hundredweight of ointment, and more than four miles of plaster.


'06.

Therapeutics in 1820.

As we enjoy listening for a while to music of the sixteenth and seventeenth century after a series of concerts of modern composers, or look with relief at triumphs of the Old Masters after a day at the Royal Academy, so it is a pleasure to set aside the ponderous text-books in Medicine or Surgery through which we have been toiling night after night, and to dip for an hour or so into the medical literature of the past and compare the methods of that time with those of the present.

It was with this idea in my mind that I picked up an old book, the title page of which ran as follows :—

THE ART

OF INVIGORATING AND PROLONGING

L I F E,

BY FOOD, CLOTHES, AIR, EXERCISE, WINE, SLEEP, &c

AND

PEPTIC PRECEPTS,

POINTING OUT

AGREEABLE AND EFFECTUAL METHODS

TO PREVENT AND RELIEVE

INDIGESTION,

AND TO

REGULATE AND STRENGTHEN THE ACTION

OF THE

STOMACH AND BOWELS.

Suaviter in modo, fortiter in re.

TO WHICH IS ADDED,

THE PLEASURE OF MAKING A WILL.

Finis coronat opus.

By WILLIAM KITCHINER, M.D.

AUTHOR OF THE COOK'S ORACLE; THE ECONOMY OF THE EYES, AND RULES FOR CHOOSING AND USING SPECTACLES, OPERA GLASSES, AND TELESCOPES; OBSERVATIONS ON SINGING, &c., AND EDITOR OF THE LOYAL, NATIONAL, AND SEA SONGS OF ENGLAND.

NEW EDITION.

LONDON:

PRINTED FOR HURST, ROBINSON, AND CO.

AND A. CONSTABLE AND CO. EDINBURGH

1824

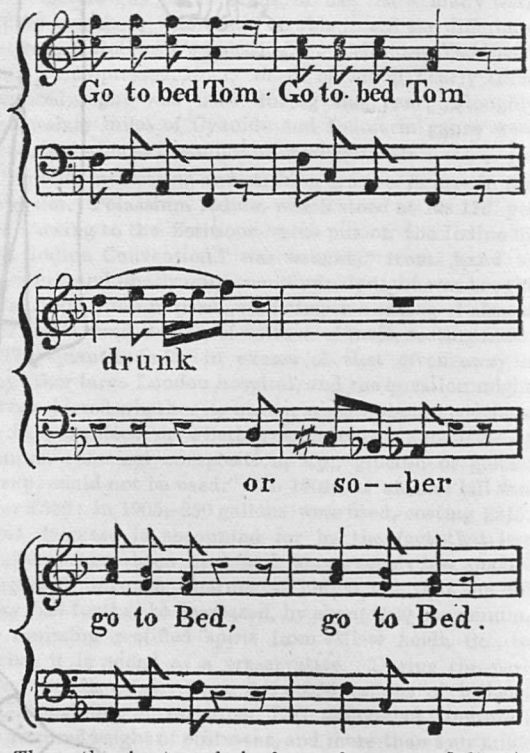
I was much struck by the change in the style of giving medical knowledge that has occurred since then. The book abounds in extracts from other authorities of the time, which add to the interest of its pages. Amongst others there is an extract from a lecture delivered by Mr. Astley Cooper before the Royal College of Surgeons in 1814, describing some experiments on the solvent power of gastric juice of Dogs. If all the medical books of that period were written after the style of Wm. Kitchener, M.D., medicine must have been a more entertaining study than it is now-a-days. A few extracts will show what I mean, better than any other method:—

> "The clearness of the Complexion is considered *the best criterion of a Man's being in good condition*—to which are added the appearance of the *under lip*—which is plump and rosy, in proportion to the healthy plethora of the constitution. This is a much more certain symptom of vigorous health than any indication you can form from the appearance of the tongue—or the pulse, which is another very uncertain and deceiving Index." (H.P.s please note.)

In his advice on the daily round, the following occurs:—

> "After dinner, sit quiet for a couple of hours—the semi-siesta is a pleasant position—*i.e.*, the feet on a stool about 7 or 8 inches high,—or if your exercise has fatigued you, lie down, and indulge in Horizontal Refreshment. 'A 40 winks nap,' in a horizontal posture, is the most reviving preparative for any great exertion of either the mind or the body:—to which it is as proper an Overture as it is a Finale."

Soon after ten he advises:—



The author is strongly in favor of pure unadulterated Beer and Wines, and had he lived in the present age he

would doubtless have aided an agitation for a Pure Beer Bill. He quotes a couplet from Dr. Arne—

"Your Wine-tippling, Dram-sipping fellows retreat,
But your Beer-drinking Briton will never be beat."

Another quotation conveys sound advice, and might well be put side by side with the old proverb about sowing one's wild oats. "The excesses of our youth, are drafts upon our old age, repayable with interest, about 20 years after date."—(Cotton.)

The treatment of obesity, and "increase of weight which threatens a distemper," was by fasting, exercise, and purging. That the latter was somewhat drastic, the following will show:—"The mean loss of weight, by several grown bodies, caused by a purging medicine composed of a drachm of Jalap and ten grains of Calomel, was about 2¾lbs. avoirdupois; and the mean quantity of liquor, drunk during the time of Purging, was about double the loss of weight" (1748).

In the chapter on Sleep, he says: "Of the two ways of fertilizing the brain—by Sleep, or by Spirituous Stimulus, ... the former is much less expensive, and less injurious to the constitution."

What he would have said about modern London is beyond me, for even in 1820 he devotes many pages to "the terrible noise that gave its inhabitants no peace: sound passes through the Paste-board Party-walls of modern Houses with most unfortunate facility—this is really an evil of the first magnitude." He seems to have a personal animosity against next-door neighbours, "Tidy-ones who delight in the sublime economy of Cinder-saving or Cobweb-catching, . . . Molidusta, who awakes the Morn with 'The broom, the bonny, bonny broom,' and other 'Savages.'" One piece of advice I have found by experience to be well-founded: "Piano-fortes should never be placed against party-walls."

His advice to Actors and Singers when Nervous or Bilious is to "give their Throats 2 or 3 days rest,—cleanse the Alimentary Canal with Peristaltic Persuaders, and Corroborate the Organs of Digestion with the Tonic Tincture." This question shows that even in his time an alliterative tendency had began to show itself.

On coming to the question of clothes, he gives much good advice on dressing suitably for the weather, but he carries it rather far when he says, "A gentleman who has a mind to carry the adjustment of his clothes to a nicety, may have the shelves of his wardrode numbered 30, 40, 50, 60, etc.; and according to the degree of Cold pointed to by his Fahrenheit, he may wear a corresponding defence against it."

In his chapter on Fresh Air, his opinions are quite up to modern ideas. He begins with a warning:—"Many invalids are hurried into their grave—by the indiscreet kindness of their friends forcing them from the comforts of a Home—for the sake of Air more abounding with Oxygen."

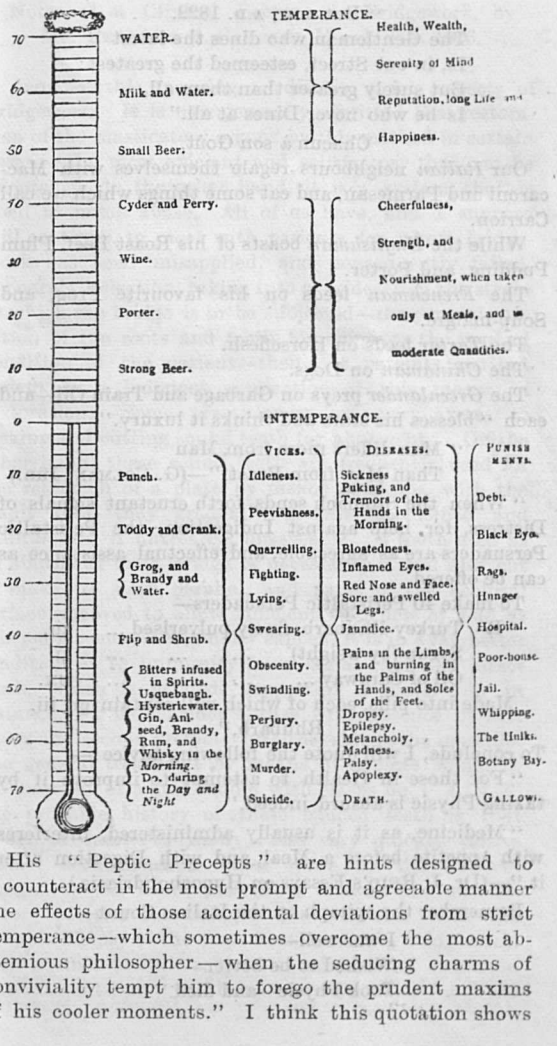
On the subject of "Spirituous liquors," he shows an intimate knowledge, both of the subject itself and its literature, and quotes the following:—

"The Russ loves Brandy, Dutchmen Beer,
The Indian Rum most mighty,
The Welchman sweet Metheglin quaffs,
The Irish Aquavitæ;
The French extol the Orleans grape,
The Spaniard tipples Sherry;
The English none of these escape,
For they with all make merry."

I notice with interest a statement from Brand's Manual of Chemistry (1819) that Claret contained 15 per cent. of Alcohol. It was certainly not the non-alcoholic beverage that it is made out to be now-a-days.

But most interesting of all is, perhaps, the following table, labelled "A moral and physical thermometer: by J. C. Lettsom, M.D.," and the position of it of "Hospitals."—

A Moral and Physical Thermometer; or, a Scale of the Progress of Temperance and Intemperance, by J. C. Lettsom, M.D



His "Peptic Precepts" are hints designed to "counteract in the most prompt and agreeable manner the effects of those accidental deviations from strict temperance—which sometimes overcome the most abstemious philosopher—when the seducing charms of conviviality tempt him to forego the prudent maxims of his cooler moments." I think this quotation shows

that the author must have possessed a most lucrative "bedside manner."

Speaking of indigestion, he says: "If the anxiety, etc., about the stomach does not speedily abate, apply the 'stomach warmer.' This valuable companion to Aged & Gouty subjects, may be procured at any Tin Shop . . . External Heat will considerably assist Concoction, and the application of this calefacient concave will enable the Digestive organs to overcome refractory materials, and convert them into laudable Chyle."

That an "egg diet" is not such a new idea as the newspapers would have us believe is shown by the following extract: "Some omnivorous Cormorants have such an ever-craving appetite, that they are raging with hunger as soon as they open their eyes—and bolt half-a-dozen hard eggs before they are well awake."

"Time was a sober Englishman would knock
His servants up, and rise by 5 o'clock."—(Pope.)

"But now, A.D. 1822.
The Gentleman who dines the latest
Is, in our Street, esteemed the greatest:
But surely greater than them all,
Is he who never Dines at all."

Chacun à son Goût.

Our *Italian* neighbours regale themselves with Maccaroni and Parmesan, and eat some things which we call Carrion.

While the *Englishman* boasts of his Roast Beef, Plum Pudding, and Porter.

The *Frenchman* feeds on his favourite Frog, and Soup-maigre.

The *Tartar* feeds on Horseflesh.

The *Chinaman* on Dogs.

The *Greenlander* preys on Garbage and Train Oil—and each "blesses his stars and thinks it luxury."

"Man differs more from Man
Than Man from Beast."—(G. Colman, Jun.)

"When the Stomach sends forth eructant signals of Distress, for help against Indigestion, the Peristaltic Persuaders are as agreeable, and effectual assistance as can be offered.

To make 40 Peristaltic Persuaders—

℞	Turkey Rhubarb, finely pulverised ...	ʒii.
	Syrup (by weight)	ʒi.
	Oil of Caraway	ɱx.

Made into pills, each of which will contain gr. iii. Rhubarb."

To conclude, I will quote the following advice:—

"For those in Health to attempt to improve it by taking Physic is absurd indeed."

"Medicine, as it is usually administered, interferes with Appetite before a Meal, and with Digestion after it."—(Dr. J. Reid's Essays on Hypochondriasis.)

Remember the epitaph on the Italian Count—

"I was well—
Wished to be better—
Took Physic—and died."

Some Parting Words:

Mr. R. Clement Lucas, at the conclusion of his last lecture on Surgery, said:—

Now, Gentlemen, the hand of Time is pressing heavily on me, and my term as a Lecturer on Surgery is fast ebbing to a close. I wish I could say something to thank you all for having taken the trouble, at such an early hour in the morning, to come and listen to me. I wish I could say something adequate—something you might be able to take away with you. But I really feel that I cannot. I feel as if I distrusted myself. There are moments, as the American poet has well expressed it, when the mind is too full for utterance, and this to me, is one of them. I can therefore only thank you all again for coming in such numbers this morning to hear me and bid me farewell. I may say that throughout my career here I have experienced nothing but courtesy and kindness from the students. I do not think I need tell you much about that career. It is a pretty long one, for I came here in 1863, and my connection with the hospital has thus lasted some forty-three years, and during all that time I have had the greatest pleasure from my connection with the hospital and from my association with the students.

I see on these benches many who have listened to me in former years, or who have assisted me in the wards, and this reminds me of a favourite theory I have long held, that a man's true descendants are not so much those by flesh-begotten—they can but be half himself—but rather those who are the offspring of his intellect. We are all of us influenced in a great measure by our descent, and it is only reasonable that that should be so. Look at the great number of ancestors each one of you has had. (Laughter.) How do you know that you have not inherited the disreputable characteristics of some one of them long since buried in obscurity? Each one has no less than eight great-grandparents to account for. Remember no man can escape from his ancestors. A man can very well escape from his descendants, but from his ancestors never. (Laughter.) To my mind the best descendants that a man can have are the offshoots of his intellect. (Hear, hear.) They are the descendants from whom he will ultimately reap the most benefit, and who will reflect the greatest credit on him hereafter. Well, it is a great pleasure to me to think that I may have been of use to some of you, and that the little that I have been able to teach you may be of service to you in after life. But I am prouder of having stimulated some to greater intellectual exertion; for there are no less than three members of the present staff who could not have attained that position had I not insisted on their leaving the broad and easy way that leads through the portals of the Royal College for the narrow and rugged steep which leads to University distinction. It is also a consolation to me on leaving to find that the three most recent promotions to the staff are all from among men who were associated with me as house-

surgeons or dressers, and I do not think we have yet exhausted the stock. (Applause.)

I like to think of you all as my children. It has been a constant pleasure to me in growing older to keep in touch with the freshness and enthusiasm of youth, and I think it keeps one young in thought. I have always felt the stimulus of it when I have come back to my work after a term of absence, and I never felt it more strongly than once when I returned after having been laid up by a very severe attack of typhoid fever for some months. I shall never forget the kind reception the students gave me on my return. I do not think I can say much more. I thank you all once again, and I wish you all a prosperous and successful career. Perhaps there are some here who may not attain to the height of intellectual success that I wish you all to reach, but all of you can strive to do your best, and I may tell you that if you cannot be clever, you may yet be kind. Kindness is a great power, and it is strange to find how often it is disregarded. Many a man of high attainments proves an utter failure when he comes to treat private patients, owing to his want of gentleness and kindness. Let me recall to you the words of that very beautiful poem, "Aurora Leigh," written, I may say, in the house where I am at present living, by Elizabeth Barrett Browning, wherein she contrasts the power of rhetoric with that of kindness:—

> I've known the pregnant thinkers of our time,
> And stood by breathless hanging on their lips,
> When some chromatic sequence of fine thought
> In learned modulation phrased itself
> To an unconjectured harmony with truth:
> And yet I've been more moved, more raised,
> I say,
> By a simple word . . . a broken easy thing,
> A three-years' infant might at need repeat,
> A look, a sigh, a touch upon the palm
> Which meant less than "I love thee" than
> by all
> The full-voiced rhetoric of those master mouths.

Now, gentlemen, as a Lecturer, I must bid you farewell. I do not know how to thank you enough for this demonstration of your good will. Every good wish of mine is yours. Such little reputation as I have I leave to you, and I know it is in safe keeping. May you all have happiness and prosperity, and every success you may deserve. (Applause.)

On Monday, the 26th ult., Mr. Higgens performed his last operations in the Eye Wards. A number of his old dressers turned up to witness the operations, and several of the Staff, including Mr. Lucas (who came with his firm), and Messrs. Fagge, Eason, and Turner, also attended. The operations—an eviseration of an eye, and the excision of a palpebral cicatrix—were quickly over, and afterwards Mr. Higgens, in the course of a short speech, said, "Well, gentlemen, I suppose you have all come to see me this afternoon, and not so much for the operations, for I must say I have never yet had such a large audience at any of my eye operations here. Having been so long connected with the work you can readily understand what a wrench it means to me having to give it up now. During the whole time I have been here I have seen many men come and go—I suppose I have seen two generations of Guy's men—and during that time I may say I have made many friends. I do not know quite how to thank you all. The whole hospital is not here, but I suppose, in a way, you who are here represent it. Well, then, gentlemen, I thank you all from the bottom of my heart, and I wish you all success, at least as much success as I myself have had. During my time here Guy's has done a great deal for me, and I have tried to do my best as far as I could. Well, gentlemen, I thank you all again."

Dental News.

Notes of a Clinical Lecture on Bridgework, by Mr. Percival S. Campkin, March 4th, 1906.

I propose this morning to discuss a few aspects of bridgework. It is now generally admitted that restoration of the masticatory organs by this method in certain cases is the most efficient and satisfactory that can be adopted. On the other hand, it is a system that is open to much abuse. All of us have, and I suppose will continue, to meet with patients for whom bridgework has been misapplied, and consequently failed. By careful selection, taking into consideration the strain to which the bridge is to be subjected—the general condition of the roots and teeth for support, the general condition of the patient—then our patients can but benefit by a judicious application of this means of restoration. Some practitioners are very averse to disking and cutting sound teeth for abutments. On the other hand, these sound teeth are frequently used for the retention of a plate by means of clasps, with the result that they gradually become decalcified and painful, and if untreated, unsaveable. A tooth used as an abutment for a bridge is necessarily disked and cut to make its sides parallel, and parts of the occlusal surface removed to allow sufficient thickness of gold at this point; but when finally capped, it is in a far better condition as to immunity from caries than the intact tooth, which is banded, supporting a plate. As an instance, let us consider a case with absence of first molar and second premolar on either side in the mascilla. The general treatment by means of a plate would be the insertion of a gold saddle with clasps on $\frac{7\ 4}{4\ 7}$. The probable history of these banded teeth is that sooner or later—in many cases very quickly—active enamel decalcification takes place on the surfaces engaged by the band, presenting difficult and unsatisfactory cavities for filling. Contrast this with the probable history of the same case treated by bridgework. With normal occlusion, there is no harmful strain on the abutments, and the bridges should be as longlived

as any of the other teeth, and the patient has not the inconvenience of a plate. Against this it may be urged that the fixed bridges are not cleanly. If constructed correctly this is not so, and they may be cleaned as perfectly as the natural teeth.

General Considerations relative to decision of treatment by bridgework :—

(i.) The Patient :—Temperament, general and dental health. The application of bridgework is in all cases tedious, and in some of a more or less painful nature. To attempt to prepare and cone very sensitive teeth for a certain type of patient would be practically impossible. In this particular type of case a well-adapted bridge may be inserted at the expense of the patient's nervous system—perhaps thoroughly demoralised for future dental operations ; or the nervous system may be spared, and the bridge be imperfectly adapted, and consequently a failure. For successful bridgework the patient must give the operator every possible assistance. For the intolerant type of patient the insertion of platework will be well advised.

(To be continued in the next issue.)

POST-GRADUATE DENTAL TEACHING.

We congratulate the staff of the Dental School upon the inauguration during the coming session of post-graduate courses.

The movement is progressive, and the strenuous and earnest dental practitioner will be afforded an opportunity of keeping abreast with the higher branches of practical work. We wish the scheme every success, and trust the Dental School will be encouraged to continue similar courses in the future. We give below for the information of dental surgeons the particulars of the instruction announced.

A course of instruction in Practical Dentistry will be given at Guy's Hospital Dental School, commencing in the first week in May, 1906. The course will consist of a series of twelve demonstrations and practical classes to be given on days suitable to the majority of the applicants, from 4.30 to 7 p.m.

Subjects :—Crowns. Bridges—fixed and removable.

Syllabus :—Selection of cases ; preparatory treatment ; varieties of crowns, porcelain crowns, their choice and adaptability ; bridge work : decision between fixed and removable ; fixation ; abutments ; stress and strain ; choice of facings ; methods of attachment ; removable bridge work, advantages and disadvantages ; parallel tubes with split posts, etc.

Patients will be provided, and practical assistance given by the demonstrators. Only the prime cost of the materials used will be charged to members of the class for all work done outside the mouth. For work supplied to patients, payments will be made by patients, and a contribution will be made by the hospital. The mechanical laboratory will be available daily for the use of the class. All instruments to be provided by members themselves ; a list of necessary instruments may be had on application to the Dean. Fee for the course, fifteen guineas. As the class will be limited, gentlemen should make early application to The Dean, Guy's Hospital Dental School, London Bridge, S.E., not later than April 24th, 1906.

A course of Dental Bacteriology will be given in the Bacteriological Laboratory, Guys Hospital, commencing May, 1906. The class will be held on Tuesdays and Fridays, from 4 to 6 p.m., and will last six weeks. The work will be chiefly practical, each sitting of the class being preceded by a short domonstration.

Syllabus :—(1) The evolution of bacteriology and the position of bacteria in nature. (2) Classification of bacteria, morphology and structure. (3) Principles and methods of sterilization. (4) Composition and preparation of nutrient media ; methods of cultivation. (5) Microscope and microscopical methods of studying bacteria. (6) Isolation and identification of bacteria. (7) Study of the chief pathogenic bacteria found in the mouth. (8) Suppuration and its associated bacteria. (9) Study of the chief non-pathogenic bacteria found in the mouth. (10) Special "mouth bacteria." (11) Biochemistry of the chief groups of mouth bacteria. (12) Dental caries and associated bacteria.

Fee for the course, including material, six guineas. Applications to be made to The Dean, Guy's Hospital, London Bridge, S.E.

Change of Address.

Dr. W. L. Chubb, from Darenth House, Sandgate, to "Earlside," S. Farnborough, Hants.

Lieutenant G. B. F. Churchill, R.A.M.C., from Aldershot to India.

Mr. C. H. Fagge, M.S., F.R.C.S., from 22, St. Thomas's Street, S.E., and 6, Cavendish Place, Cavendish Square, W., to 3, Devonshire Place, W.

Mr. F. E. Fremantle, M.Ch., F.R.C.S., from 50, Lower Sloan Street, S.W., to 30, Chester Street, Belgrave Square, S.W.

Captain F. H. Hardy, R.A.M.C., from the Eastern Command to Colchester.

Captain W. J. S. Harvey, R.A.M.C., from Hong Kong to Chester.

Lieutenant R. P. Lewis, R.A.M.C., from Guy's Hospital to Netley.

Captain J. Matthews, R.A.M.C., from the Eastern Command to Woolwich.

Captain H. D. Packer, R.A.M.C., from the Southern Command to Tidworth.

Lieutenant G. H. Rees. M.B., R.A.M.C., from Guy's Hospital to Netley.

Mr. C. B. Thomson, F.R.C.S., from 2, Granville Park, Lewisham, to Romansleigh, Wimborne, Dorset.

Mr. F. T. H. Wood, M.B., B.S., from Guy's Hospital to the General Dispensary, Broad Street, Nottingham.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-third List of Collections.

(Received up to Thursday, April 5th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections

Name.	Shillings.
Amount previously acknowledged ...	70,382
"An old Guy's Nurse"	100
Bridges, Miss A. (2s.)—A Patient	20
Bright, Sister (916s.)—Mr. Hopkins	21
Carr-Hill, Miss (25s.)—Mrs. Boucher	5
French, Dr. Herbert—Medical Ward Clerk's Microscope Fees	2
Higgins, Mrs.—Miss Greenwood 20, Mrs. Wilson 2	22
Karpeles, Mrs. (1,496s.)—Mr. C. Rickards 10½, Mrs. Henry 1, Miss Henry 1, Mrs. Nathan 2, Miss Nathan 1, Mrs. Schlesinger 1, Mr. Spero 1 ...	17½
Lydia, Sister (108s.)—A Friend	10
Millar, Miss (91½s.)—J. M.	8½
Millar, Miss A. (165½s.)—E. M. 9, C. H. W. 8 ...	17
Mollison, Miss	5
Seaber, Miss Constance—Mr. J. B. D. Green 1, Miss W. Green 1, Mrs. F. W. Mayer 1	3
Shattock, C. R. (1s.)—Collected by Miss Dunn ...	3
	70,616½
Further collections from sources outside the Hospital	7½
TOTAL (up to 5th inst.)	70,623½

Papers by Guy's Men.

Report on an Outbreak of Supposed Enteric Fever at Bulford Camp in the Spring of 1904. By Major C. M. Fleury, R.A.M.C.—*Journal of the Royal Army Medical Corps* for April, 1906.

On the Diet in Acute Illness. By G. Newton Pitt, M.D., F.R.C.P.—*The Practitioner* for April, 1906.

The Royal Army Medical Corps Militia as a Practical Sanitary Corps for the Army. By Captain K. Steele, R.A.M.C. (M.)—*Journal of the Royal Army Service Corps* for April, 1906.

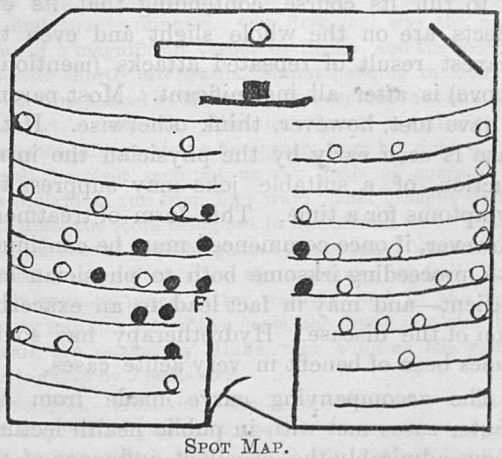
A Case of Sarcoma of the Lung. By H. W. Webber, M.D., M.S. Lond., F.R.C.S. Edin.—*The Lancet*, 31st March, 1906.

In Lighter Vein.

PHTHANTELOGIA *

Definition.—An acute contagious disease characterised by an eruption of the impatient from the lecture theatre.

Etiology.—The disease occurs in epidemics but sporadic cases are also met with. It may be prevalent at the same time as other diseases of a similar nature, or it may precede them. It is met with most frequently in the young, cases being rare after the sixth year. The specific germ has not yet been discovered. It is undoubtedly a distinct disease though some authorities believe that *lecture sleeping sickness* is due to the same cause. One attack does not protect. The carefully compiled statistics of this hospital shew that, as in pneumonia, one attack renders the patient more liable to a second invasion. With regard to its highly infectious nature I need only refer to the accompanying "spot map." It shows the incidence of the disease during one of our Public Health lectures. For some reason as yet obscure the disease is met with in its acutest form during this period of the week. Reference to the "spot map" will readily convince one of the highly contagious nature of the disease and it will be seen that the focus of infection is readily traceable to someone near the door.



SPOT MAP.
• = Cases of infection.
Focus of epidemic at F.

* Apparently derived from the Greek φθάνω, I anticipate; τελος, the end; λόγος, lecture ! !—(ED.)

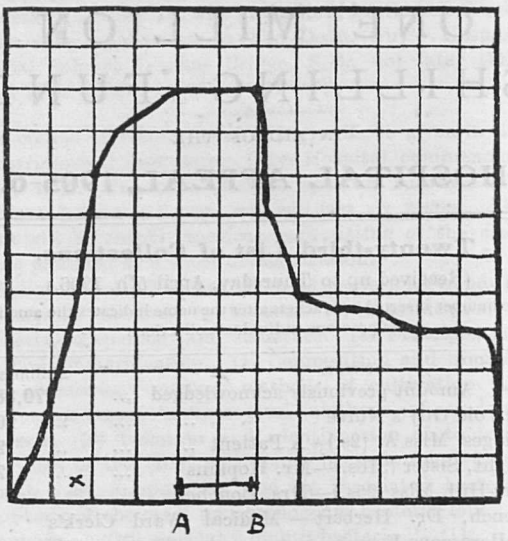
Symptoms.—After a period of incubation of from five to ten minutes, the patient becomes restless and feverish and is obviously uncomfortable. There may be a slight attack of perspiration and the hand is frequently passed through the patients hair. A scarletinal blush may precede the eruption. These symptoms are most marked in the first attack; subsequent invasions may ensue without any premonitory symptoms. Convulsions are rare though instances are recorded where the patient exhibited paroxysms of laughter of the most pronounced type. The eruption takes place rather suddenly and is from its nature difficult to trace unless the student wilfully innoculate himself with the virus. There are two interesting varieties of the eruption; one noisy and openly impudent, the other stealthy and slow. The latter is more frequently met with in older subjects.

Diagnosis.—This is as a rule easy, particularly if the case is seen during a first attack. The entire absence of prodromal symptoms in the cases of secondary invasions may render early diagnosis impossible.

Prognosis.—In most instances this is favourable. But in serious cases there is grave danger of "plough" in the subject at his next medical examination.

Treatment.—Authorities differ as to the best method of combating the disease. Some allow it to run its course, contending that its evil effects are on the whole slight and even the gravest result of repeated attacks (mentioned above) is after all insignificant. Most parents I have met, however, think otherwise. If the case is seen early by the physician the introduction of a suitable joke may suppress the symptoms for a time. This form of treatment, however, if once commenced must be continued—a proceeding irksome both to physician and patient—and may in fact lead to an exacerbation of the disease. Hydrotherapy has sometimes been of benefit in very acute cases.

The accompanying curve made from the acuter cases met with in public health lectures show admirably the excellent influence of the janitor in preventing the disease. In fact the best treatment I know of is janitor in large and continued doses which hardly ever fails.



Curve of Attendance at Lecture.
Ordinates = number of persons present.
Abscissa = time in periods of five minutes.
* Entrance of lecturer.
A—B Presence of Janitor.

Appointments.

Civil.

Bradbury, J. C. O., M.R.C.S., L.R.C.P. Lond., has been appointed District Medical Officer of the Elham Union.

Richmond, B. A., M.B., B.S. Lond., has been appointed District Medical Officer of the Bermondsey Union.

Wood, F. T. H., M.B., B.S., B.Sc. Lond., has been appointed Assistant Surgeon to the Nottingham General Dispensary.

Naval and Military.

Surgeon Richard Willan, R.N., has been appointed to the *Monmouth* on recommissioning.

Captain H. St. J. Fraser, I.M.S., Madras Establishment, is promoted to be Major. Captain Fraser served with the Malakand expedition (medal with clasp) and in the Tirah campaign. He was present at the capture of Sampagna and Arhanga Passes and the operations in the Bazar Valley, December 25th to 30th, 1897 (clasp).

Lieutenant H. C. Keats, M.B. Lond., I.M.S., is promoted to be Captain.

Sport.

Association Football.

GUY'S v. ST. BARTHOLOMEW'S.

Inter-Hospital Senior Cup (Final Tie).

This match was played on St. Thomas's ground at Chiswick, on Tuesday, March 20th. Rain fell almost continuously throughout, but a good number of spectators nevertheless followed the game. Guy's, losing the toss, started against the wind, and from the beginning began to press, and soon gained a corner which was splendidly taken by Berry, but the golden opportunity was missed in front of our opponent's goal; the attack, however, was kept up vigorously, the halves being particularly noticeable, and from a pass by Zorab, King came within an ace of scoring. Guy's now were compelled to defend, but the backs, Bastard and Robertson, proved equal to the occasion and cleared splendidly considering the very slippery state of the ground. Again, Guy's came back to the attack, and Barker sent in some good centres, but the opposing backs succeeded in preventing any score, till, from a pass by Denning to King, who sent the ball to Whitely, the latter dribbled skilfully past the backs, and shot a splendid goal at a difficult angle from the right wing. From that point till half-time the game was very even, but on crossing over, Bart.'s made some very determined attacks, and our supporters on the touch-line had some anxious moments. Wood, however, in goal, was sound, and saved well on four or five occasions. During a skrimmage in front of goal, Zorab had the misfortune to injure his right leg, and could take no further part in the game. Guy's now, although a man short, played up splendidly, and Barnett, at right half, was equal to every emergency; the forwards were playing with plenty of dash, and from a centre by Berry, King sent in a grand shot, which just grazed the bar and went over. Barker shortly afterwards gave Witts a pass in front of goal, but he shot straight at the goalkeeper, who was able to clear. Despite many efforts to increase our lead, no further goal was scored, and the game ended, leaving Guy's victorious by 1–0, and holders of the Cup.

Hearty congratulations to Denning and his team on so successful an ending to the season, and for restoring the Cup to the Smoking-room. Long may it remain there! The whole team showed excellent form, and the inclusion of Whitely and King has proved an acquisition to the forward line, while Barker's accurate centreing from the left wing has been of the greatest service throughout the Cup Ties. The halves defended splendidly throughout the game, and the backs kicked with good judgment and saved very awkward situations. The fact that most of the present team are available for next season augurs well for the future. Team:—

Guy's.—Wood (goal); Bastard, H. Robertson (backs); E. Barnett, A. F. Denning (capt.), A. Zorab (halves); A. W. Berry, Witts, Whitely, King, F. Barker (forwards).

CHARING CROSS II. v. GUY'S II.

Inter-Hospital Junior Cup (Semi-Final).

This match was decided at Winchmore Hill on Monday the 26th of March, and ended in favour of Guy's by 6 goals to nil. The game commenced midst a downpour of snow, which happily only lasted a few minutes. Guy's had tough work in the first half, in spite of the fact that they had a strong wind behind them, and only managed to score once, through Boxall, before the interval.

On changing over, however, we pulled ourselves together, and the forwards, through good combination, carried the ball up the field and Boxall again scored. The visitors were only dangerous once, when their centre forward broke away, and only had the goal before him. Hole, however, caught him up before he had time to shoot, and cleared. Hinde, Eccles, Simms, and Boxall, contributed the remaining goals.

Remarks.—Boxall played a good game, and Mitchell at outside left played well in the second half, though weak at first. Haycraft, luckily, had little to do.

GUY'S v. BART.'S (Holders).

Inter-Hospital Junior Cup (Final Tie).

This match was played at Hale End on Wednesday, March 28th. After a delay of an hour, owing to the non-arrival of the Bart.'s men, we lined up as follows. Team:—

Guy's.—C. F. Haycraft (goal); K. Hole, W. Johnson backs); J. Edmond, V. Townrow, C. W. Greene (half-backs); H. W. Eccles, H. Simms, W. F. Boxall, E. B. Hinde (Capt.), D. Mitchell (forwards).

Hinde, winning the toss, decided to play with the wind. The Guy's forwards quickly asserted themselves, and carried the leather into their opponents' quarters, and, except for occasional attacks made by the Bart.'s right wing, we continued to have most of the play for the first twenty minutes. Our first goal was the outcome of a magnificent corner by Eccles, and the second followed shortly afterwards, Simms heading in from a corner well kicked by Mitchell. This seemed to stimulate the Bart.'s forwards. Their outside left scored with a good shot, after taking a fine centre from his right wing. Boxall, however, soon put us two goals up again by a fine individual run from half way. This brought us to half time, the score being 3–1 in our favour.

In the second half the game became much more even, and before long Bart.'s had again reduced our lead; but Guy's were in much better training, and in the last twenty minutes scored two goals, the first a fine shot by Boxall, the second by Hinde, thus winning the game and the Cup by 5 goals to 2.

Remarks.—Hole and Johnson were very safe at back and Haycraft in goal cannot be blamed for either of the goals scored against him. These two goals by the way are the only ones which have been scored against him in Cup ties. Townrow was again easily the best half on the field. Greene had some difficulty at first in checking the right wing, but nevertheless played exceedingly well.

Edmond played one of his best games, completely holding the left wing in check. Mitchell has never in Cup Ties found his usual form but improved greatly towards end of game. Hinde put in a lot of good unselfish work. Boxall was a great acquisition; his runs through on his own being a great feature of the game, he had hard luck in not scoring on other occasions. Simms in a Rugby jersey (unfavourable omen) was in great form, passing well to his partner. Eccles worked well both in defence and attack but placed too much reliance on his speed, several times kicking the ball too far.

Inter-Hospital Boxing, Fencing and Gymnastic Competition.

GUY'S v. LONDON.

On Thursday, March 29th, at 8 p.m., this competition took place in the Pavy Gymnasium, resulting in a win for Guy's.

Never was the old adage that "Nothing is certain in the world of sport" better exemplified than by the victory which brought us the Boxing Cup, now reposing in the Smoking Room.

Disasters showered so thick on the Hon. Sec., that at one time he counselled "scratching," or, at any rate, postponing the contest. First, enough fencing men could not be found to make up the number. Then two boxing men whom we looked upon as "snips" for their weights, were crocked at the last moment. First E. Barnett broke his thumb, and a substitute had to be found at a week's notice, then E. P. Minett developed a large and painful "hæmatoma auris," which refused to go down after repeated aspirations, and finally had to be opened and drained; these two men had both been in strict training for two months, and their loss was very hard luck indeed.

Finally a team was made up and their names were sent in, and then, as if we had not already had enough bad luck, Mills, who was down for single-sticks, scratched by telegram on the day of the contest; no substitute could be found, so rather than lose the points for the Hospital, Minett took his place at half-an-hour's notice, with his head bandaged, and had the good luck to win the event.

M.C.'s:—Messrs. Barnett and Minett.

Timekeeper:—Dr. Allport.

Boxing Judges:—Messrs. Hoare, Goodwin and Mills (A. B. A.).

Fencing Judges:—Messrs. Staveley (A. F. A.).

Events:—

GYMNASTICS.

Messrs. P. A. S. Dyson and G. Hunt of Guy's, beat Messrs. Beresford and Neave (London), in both first and second strings, scoring five points straight off. Both men were at the very top of their form, and were a well matched pair, beating their rivals in nearly every exercise. Hunt scored 88½, and Dyson 88, out of 100 possible.

FENCING

Was good. Haycraft, our first string in both foils and sticks, was especially good. He won both events, and scored six points for his Hospital in capital style. Haycraft will be certain to rise in the fencing world, and we hope to see his name in the championships soon. Minett secured the second string in sticks against C. Gibson, of the London, who seemed quite disconcerted by his opponent's sudden and fierce onslaughts.

BOXING.

Feather Weights.—R. T. Brotchie beat M. J. Marks. Marks started off at a great pace, and was scoring freely both in first and second rounds, and apparently had matters all his own way when he seemed suddenly to slack off, and in the third round allowed Brochie to do all the leading, a fatal mistake always, as shown by the decision going against him. Marks should remember that it is impossible to win boxing events unless he trains and practises regularly and seriously.

Light Weight.—A. M. Kemp beat J. Raymond. This was the best set too of the evening, and Kemp, who took Barnett's place, boxed at the very top of his form, and indeed has never boxed better. Considering he had only a week's notice to go into strict training it was a splendid performance. Raymond was very persistent and gave him no rest, but the fact that Kemp has boxed regularly all the season stood him in good stead, and his was a most popular win.

Middle Weight.—J. C. Wood beat C. H. Marshall. Considering Marshall had to take Minett's place at three days notice and expected to have to meet R. Burgess, a well-known boxer, it was most plucky of him to enter without any training whatever. He put up a splendid fight against Wood, who is an experienced boxer, having boxed both in last year's competitions, and in the Belaize open competition. But experience and training are bound to tell, and Marshall after a very game fight indeed, had to be content with second place.

Heavy Weight.—P. H. Baker beat T. E. A. Carr. Baker was at least two stone heavier than Carr, besides being much stronger. The scoring was fairly even in the first and second rounds, but Carr received a severe gruelling in the third, chiefly owing to his not making full use of his superior condition and activity, and failing to make use of the size of the ring to tire his heavier antagonist. However, he stuck gamely to his task until the bitter end, and had the satisfaction of the audience calling for three cheers for the loser.

Dr. Pavy sent a letter to the Hon. Sec. congratulating the Team.

Birth.

SMITH.—On April 4th, at 204, Selhurst Road, South Norwood, the wife of W. H. M. Smith, M.R.C.S., L.R.C.P., Lond., of a son.

Death.

ROPER.—On the 26th February, killed by an accident at Apiti, Fielding, New Zealand, William, twin son of Dr. Arthur Roper, of Colby, Lewisham Hill, S.E., aged 31 years.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

VOL. XX., No. 466.] APRIL 21, 1906. [SIXPENCE.

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Passim.

ON Monday, the 9th inst., Mr. Lucas went round his wards for the last time, and a large number of those who have had the privilege of working under him took advantage of the opportunity thus afforded them to bid farewell to their old chief and listen to his final clinical dissertation. At two o'clock, when Mr. Lucas drove up, a small crowd was waiting to receive him, and by the time he had finished going round in Lazarus, his following included almost everyone at the hospital who had been associated, even remotely, with the firm, and many others who have never had the honour of being Leucocytes. The round through Martha and Astley Cooper took up some time. Each case was seen, and many were lingered over. Here and there one was specially interesting, and the majority offered opportunities for teaching and for those bits of personal reminiscence that add so greatly to the value of a purely clinical demonstration. In Astley Cooper a compound fracture case afforded an opportunity for comparing modern methods with those in vogue at the time when the retiring surgeon was a student: in Lazarus a patient recalled an incident in the life of the traveller Burton, and in Astley again there was the interesting individual whose leg had been broken by an obliging friend who had tried to help him after a fall.

IN Astley the firm had provided tea on tables decorated with pink roses—the chief's favourite flower. There, when at last the round was over, a halt was made, and Mr. Lucas took a personal farewell of the individual members of the firm, and of those of his old pupils who were present. There was a general desire for a speech, but he shook his head, and finally, when pressed, thanked the company in a few words, feelingly spoken, wishing them success and happiness in life. Then, at last, he drove away, responding to the cheers by raising his hat. He carries with him the good wishes of us all. Unitedly we appreciate what he has done for the Hospital, and there are many of us who owe him a debt of personal gratitude for his kindly help and courtesy as a teacher. May we long have the benefit of his experience and skill as Consulting Surgeon to Guy's!

WE are glad to be able to state that Dr. Bryant, whose recent indisposition forced him to take a prolonged rest, has returned to London greatly improved in health. We look forward to welcoming him back in his ward before long.

On Tuesday, May 1st, the Nurses' Choral Society, the Students' Glee Club, and the newly-formed Orchestral Society will give their first performance under their new title of "Guy's Hospital Musical Society." Since its commencement in October of last year the Orchestral Society has improved greatly, and now, under the able conductorship of the Dean, it is well on the road to fame. On this occasion, we hear, it will be represented by soloists only, the larger part of the programme being supplied, as in former years, by the other two well-known sections. The Nurses' Choral Society and the Students' Glee Club have now reached their tenth season, and they have, in spite of some vicissitudes, maintained a remarkably high level of excellence in their numerous performances. This is, without doubt, mainly due to the energy and painstaking tuition of the Conductor, Mr. Henry Taylor. We hear on good authority that the forthcoming concert will well maintain their reputation, and in view of the fact that the proceeds of the evening, after paying expenses, are to be handed over to the Million Shilling Fund, we wish all concerned the best success. At the same time we would remind our readers that one of the essentials for a successful performance is a full house with an appreciative audience. We have been asked to draw the attention of members of the Clubs' Union to the fact that a limited number of tickets, for the use of students only, will be sold at a reduced rate. Such tickets may be obtained from the secretary by application on or before April 24th. After that date the full price will be charged.

A correspondent has been good enough to forward us several marked copies of the *Church Family Magazine* containing a series of articles by Mr. T. Moulton, entitled, "An Exposure of Christian Science." Most of us have by this time made acquaintance with "Eddyism," and marvelled at a faith which, if it could not move mountains, yet claimed to be able to cure a tubercular tarsus, and that multitude of protean disorders which the layman invariably diagnoses as "cancer." Yet it is a subject few of us would care to discuss seriously. We can sympathise with the patient who wanders from the hospital to the quack, and from the quack to Mrs. Eddy. Has not a leading light of our profession put it on record that "medical men are the first to transgress the subtleties of their etiquette," and pass from one consultant to the other, when they fancy there is something the matter with them, in the cheerful expectation of finding a difference of diagnosis or a change of prescription? But most of us would prefer to let the subject of Christian Science well alone, or to follow the discreet man who knows how to "differ without dissent."

To those, however, who care to discuss the matter we can recommend Mr. Moulton's articles, written as they are in a studiously moderate fashion. Some of the so-called cures which he cites are interesting if only to show the ludicrous nature of many of the claims which Eddyites put forward in all seriousness. Thus, "a gentleman of Pickwickian plumpness explained that through Christian Science he, who had once belonged to Pharaoh's lean kine, had gained three inches round the waist," and had three times been obliged to "enlarge the boundaries of his surroundings"—an admirably euphemistic way of stating an obvious fact which scoffers would have put down to something very different from "Eddyism." So also a lady who, for some reason not stated, had been "unable to put on her boots," had a course of treatment, and stated that she "could now put them on quite easily!"

We offer our sincere, if somewhat belated, congratulations to the Junior Soccer team on winning the cup in the final against Bart.'s. The team has had a very successful season, and an almost clean sheet, so far as cup-ties were concerned. The final game at Hale End was a well-contested match, resulting in a win by five goals to two.

While on the subject of matches, may we plead for longer and fuller reports of such as are played in future? The cricket season is at hand, and we understand that many fixtures have been arranged. We sincerely trust that the secretaries of the various teams will be

able to furnish the Gazette with more comprehensive and more detailed accounts of the games played. There has been a tendency to cut down the reports, to make them, in fact, a bald summary of events and scores, with little description and less comment. A game that is not worth reporting in full—and few of our hospital matches are of that kind—is scarcely worth noticing at all, and one that is worth recording should be chronicled in such a manner that those who have not had the pleasure of seeing it played are able to interest themselves in it as much as the man who took part in it, and to whom the report is a memento of an interesting experience. This is a matter in which we need the co-operation of the secretaries of the various teams in particular and of individual members generally, and we feel sure that with their help our reports in future will be all that can be desired.

What has become of the Bicycle Club? It still figures in the Blue Book, but it seems that, for the past two years at least, it has done little, if anything, to justify its inclusion in that interesting and instructive little manual. It is said that an effort was made last year to revive it, but for some reason or other nothing has resulted from the attempt. There are many men at the Hospital who are keen cyclists, and there is no reason why the club, if started again, should not be a success. Since the boating section does not appear to be over enthusiastic, it is to be hoped that the cyclists will make another attempt to put their club on a firm footing and show themselves worthy of the page that the enumeration of their past victories occupies in the Blue Book.

Elsewhere appears a *resumé* of the programme of the proposed Historical Exhibition which Mr. Wellcome, of the well-known firm of Messrs. Burroughs and Wellcome, is organising. The medical profession already owes a debt of gratitude to Mr. Wellcome for his contributions to medical history, and the interesting reproductions from old manuscripts which from time to time appear on the advertisements of his firm are known to all of us. If he is able to bring the proposed exhibition to a successful issue—and there is no reason why it should not be a brilliant success—he will have done one more service of value for the profession. It is, we believe, the first time that such an undertaking has been seriously thought of in England, and of its practical utility there can be no question. It will be as instructive as it should be interesting, not only to those who are serious students of medical history—a branch of study unfortunately too often neglected by medical men—but equally to those who merely take a transient interest in the curiosities of a profession which has given so much that is curious and quaint to the world. There are many Guy's men who are in a position to help Mr. Wellcome in this undertaking, and we trust they will be able to communicate with him, and place at his disposal whatever data of interest they may possess. It is a fine opportunity for those of us who are practising in foreign and out-of-the-way parts, where curiosities of native medical lore abound, to do a bit of private research. We wish the exhibition every success, and look forward with interest to its opening.

The general Report of the Hospital, which is ready for issue, and of which we give a brief summary in this number, makes interesting reading, and not the least interesting part of it is the twenty closely-printed pages which are devoted to an enumeration of the contributions to the Million Shilling Fund. There has been a tendency of late to speak slightingly of this worthy Fund. Even the Passimist has had a mildly deprecating note on the inadvisability of aspiring to a seven-figured title. It is of course open to discussion whether or not so ambitious a title was justified. On the principle that "a man's reach should exceed his grasp," it was justified, and there can be no doubt that the Fund, if it has not been so brilliantly successful as we hoped and trusted, has at least brought the Hospital into touch with many hundreds of sympathisers who found in it an opportunity of materialising their sympathy in the form of small contributions. These twenty closely-printed pages are, on the whole, highly gratifying testimony to the charitable interest of a large number of persons, and they show that the Fund

has appealed to all classes and conditions of men and women. There are no huge sums on the list; there is no parade of three-figured items in the pounds' column, but there is a long array of shillings and of half-crowns. The larger contributions came from collections, from staffs of banks and companies, or from those friends of the Hospital who interested themselves very closely in the Appeal, and exerted themselves strenuously in making known the claims of this Institution. To such good friends the Fund owes a great deal, and the fact that it has enabled them to do so much on its behalf is, in a measure, a sufficient justification for its existence. There is no reason why it should not in time equally justify its title.

There are other matters of interest in the report. To the most interesting, to the one that should appeal most forcibly to those who are intimately connected with the Hospital,—the question of the future, the discussion of coming changes—to that we hope to return later. It needs a closer attention and a calmer review than can be given it immediately after reading the details of ordinary hospital affairs. Meanwhile we would only draw attention to those paragraphs in Mr. Cosmo Bonsor's report in which he touches upon the future prospects of the Hospital, in the sincere trust that those who peruse his remarks may find means to help in the realisation of our hopes and aims for the improvement of Guy's, and for those necessary and inevitable alterations which we are at present prevented from carrying out.

The Million Shilling Fund is indebted to the recent dramatic performance at the St. George's Hall, Langham Place, W., for a substantial contribution to the Fund. We publish elsewhere a short account of the performance, which was excellent in every way, and well attended, the house being crowded. It is a pity that more Guy's men did not avail themselves of the opportunity to support the Fund; as a matter of fact, there were very few hospital students present at the performance. This was due, no doubt, to the fact that the performance took place during the vacation. We understand that the Million Shilling Fund has benefited to the extent of some £20 or more, and that a great deal of the financial success of the evening is due to the efforts of volunteer programme and sweet sellers, who valiantly exerted themselves in the cause of charity. The original idea of the performance was due to Mr. Louisson, and its success is largely due to his active exertions in getting up the performance. He has been helped, however, eagerly and enthusiastically, by the band of ladies and gentlemen to whom we beg to tender our most cordial thanks for their services on behalf of the Hospital.

Correspondence.

To the Editor of Guy's Hospital Gazette.

The First Nephrectomy.

Dear Sir,—I notice in your issue of this date "The First Successful Nephrectomy performed in Guy's Hospital." Now, sir, the first operation was performed by Mr. Durham—the first, in fact, in England. It had previously been performed in Vienna, but Mr. Alfred Durham was the first man to perform it here, and *the operation was quite successful.* The woman had been suffering from very severe pains for a long time, and her life was quite a misery to her.

I perfectly recollect Mr. Durham saying immediately before the operation that "he doubted if we should find any disease optically in the kidney." This was borne out afterwards. When the kidney had been excised it was passed round the operating theatre for inspection, and no disease was apparent. It was afterwards submitted to microscopical tests, the results of which, however, I do not remember. The woman died, I believe, from secondary hæmorrhage. I was present and assisted at the operation as dresser.—Yours truly,

ALBERT CHURCHWARD.

206, Selhurst Road, South Norwood, S.E.
7th April, 1906.

Papers by Guy's Men.

An Epizootic occurring amongst Partridges. By G. L. Eastes, M.B., B.Sc. Lond., and C. A. Ensor, M.R.C.S., L.R.C.P. Lond.—*Journal of Pathology and Bacteriology*, January, 1906.

Some of the Clinical Aspects of Pneumonia. By Donald W. C. Hood, C.V.O., M.D., F.R.C.P.—*The Clinical Journal*, April 11th, 1906.

A Case of Appendix Abscess with Profuse Hæmorrhage. By John D. Malcolm, F.R.C.S.—*Ibid.*

Chronic Constipation.

CLINICAL LECTURE BY Mr. LANE,
February, 1906.

Gentlemen,—The subject of defective evacuation of the contents of the gastro-intestinal tract which I bring before your notice is of the greatest importance and interest to us both as surgeons and as physicians. Owing to the varying severity of the conditions consequent on this there must be wide room for difference of opinion as to the advisability of surgical interference, as to the exact nature of such operative measures should they be considered advisable or necessary, and as to the benefit resulting from them.

Still, however our opinions may differ as to the treatment called for in any particular case, there can be no doubt that the pathological changes which are present in these conditions of imperfect drainage are most obvious and important and show that any mechanical interference with the functions of the gastro-intestinal tract is far-reaching in its capacity for harm, and that once the mechanism of the intestines has deviated materially from the normal, such alterations together with the evil results consequent upon them, can be met only very partially even by extensive surgical measures.

In order that we may be in a position to discuss their treatment we should understand clearly their mechanics, and I propose to describe them as clearly and as briefly as I can. You may not accept my description of these changes as accurate, or, if you allow their existence, you may regard the explanation given of their causation as incorrect. Yet I am sure that when your attention is called to them, if you have not already done so you will take the first opportunity of testing their accuracy in the living body, and will not be merely satisfied to say that you have never observed them and that therefore you doubt their existence. Their presence or absence is capable of absolute demonstration. As to whether the nature of their causation as described is correct or not I must leave to your judgment.

The alterations undergone by the gastro-intestinal tract.—The earliest and most conspicuous changes take place in the large intestine, which is practically the cesspool of the system, and these are most apparent in the first instance in its cæcal portion and gradually extend to its termination.

The cæcum becomes dilated and elongated, so much so that when distended it occasionally occupies the entire pelvis, displacing and compressing the viscera which normally occupy this space.

The portion of the cæcum above the brim of the pelvis, together with the ascending colon, is retained in a position of abnormal fixity to the posterior wall of the abdomen. This is produced by the development of adhesions between the outer aspect of the large bowel and the peritoneum covering the abdominal wall in its vicinity. In advanced cases these adhesions are supplemented by a mesentery in

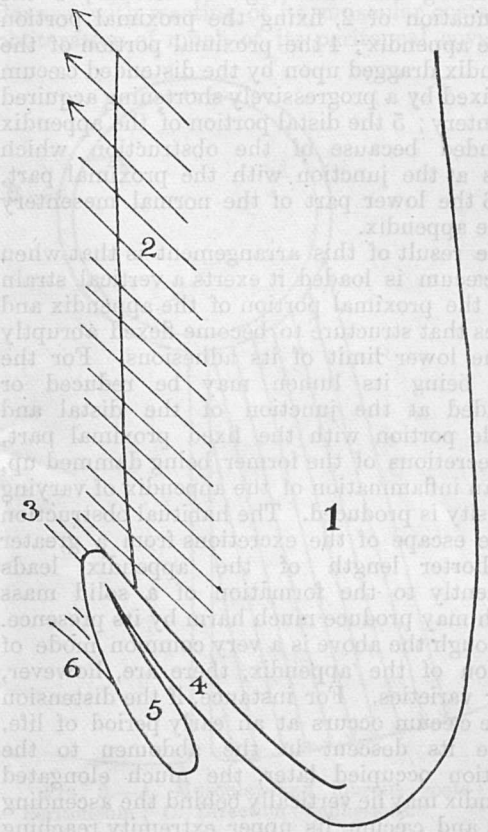

Fig. 1.

which vessels of some size are contained. Not only do the adhesions anchor this part of the large bowel, but they also bind down to the iliac fossa a proportion of the appendix. They usually attach about a third or a half of its proximal portion, often terminating below in an abrupt, free margin, or forming a pucker in its normal mesentery. The acquired mesentery of the appendix is often distinct from its

normal mesentery, while at other times it is intimately adherent to it. It becomes progressively shorter from its proximal to its distal limit, fixing this portion of the appendix so that its distal portion is more or less abruptly flexed upon its proximal part. In this manner the proximal portion of the appendix becomes part of the anchor or ties resisting the downward displacement of the cæcum and performs the function of a ligament.

A glance at this diagram (Fig. 1) explains the mechanics of the condition:—1 represents the lower end of the cæcum, which is shown in a distended condition; 2 the adhesions or mesentery fixing and retaining the cæcum; 3 the continuation of 2, fixing the proximal portion of the appendix; 4 the proximal portion of the appendix dragged upon by the distended cæcum and fixed by a progressively shortening acquired mesentery; 5 the distal portion of the appendix distended because of the obstruction which exists at the junction with the proximal part, and 6 the lower part of the normal mesentery of the appendix.

The result of this arrangement is that when the cæcum is loaded it exerts a vertical strain upon the proximal portion of the appendix and causes that structure to become flexed abruptly at the lower limit of its adhesions. For the time being its lumen may be reduced or occluded at the junction of the distal and mobile portion with the fixed proximal part, the secretions of the former being dammed up, and an inflammation of the appendix of varying intensity is produced. The habitual obstruction to the escape of the excretions from a greater or shorter length of the appendix leads frequently to the formation of a solid mass which may produce much harm by its presence.

Though the above is a very common mode of fixation of the appendix, there are, however, other varieties. For instance, if the distension of the cæcum occurs at an early period of life, before its descent in the abdomen to the situation occupied later, the much elongated appendix may lie vertically behind the ascending colon and cæcum, its upper extremity reaching high up into the loin posteriorly, being fixed by and involved in the acquired adhesions which bind down the outer wall of the ascending colon and cæcum to the abdominal wall. Or again, the appendix may not acquire any adhesions till the cæcum has been forced down on to the floor of the true pelvis, where it may become attached to any structure in the vicinity. This is especially the case if an abscess has formed about it. These several variations in the form of the cæcum and appendix have been incorrectly described as retroversions to ancestral types, anatomical variations, etc.

The upper limit of the ascending colon is abnormally fixed and occupies a higher position than in the healthy subject. This is consequent on the contraction of an acquired band of peritoneum and of adhesions which, dragging upon the flexure, oppose the downward displacement of the large bowel. This anchoring band is attached to the kidney and to the abdominal wall immediately external to it, the flexure being bound to them more closely and rigidly than normal. The increased intimacy of relationship of this viscus to the kidney and to the ilio-hypogastric, ilio-inguinal and last dorsal nerves is also of importance clinically.

Associated with the fixation of the cæcum and ascending colon and the consequent limitation in its free functioning there is much wasting of the involuntary muscle wall.

The transverse colon forms a loop with its convexity downwards, and the limit to which this descends varies. Sometimes a portion of the loop occupies the true pelvis, reaching quite to its floor, disputing possession of that cavity with the cæcum which has usually previously occupied it.

The descent of the transverse colon increases the sharpness of the angle formed by the ascending colon with its descending limb, and also that formed by its ascending limb with the descending colon. The splenic flexure is also dragged upwards and backwards in an abnormal manner by a hypertrophy and contraction of the pleuro-colic fold, supplemented by other peritoneal bands of new formation developed clearly with the object of supporting the strain on this flexure exerted by the loaded transverse colon in the erect position.

Where the descending limb of the transverse colon comes into contact with the ascending colon and cæcum adhesions retain them directly, while below a mesentery of variable breadth connects them indirectly. The same formation exists on the left side between the ascending loop of the transverse colon and the descending colon.

The presence of these mesenteries and adhesions renders any return of the transverse colon to its normal level impossible, while its descent is favoured by their progressive contraction.

The descending colon is fixed in a manner similar to the ascending colon by adhesions and mesenteries attaching its outer surface to the

peritoneum covering the adjacent abdominal wall.

I have illustrated diagrammatically in Figs. 2 and 3 this process of progressive fixation of the large bowel. The first figure represents a transverse section of the ascending colon or of the

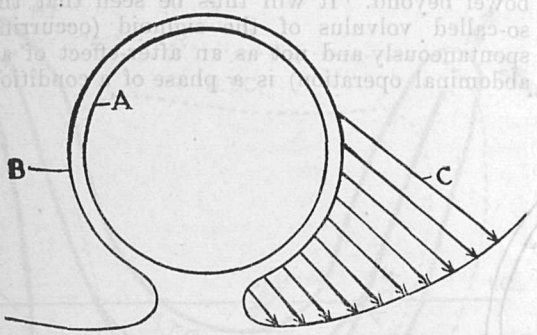

Fig. 2.—Transverse section seen from above. A. Muscular and mucous coats; B. Peritoneum; C. Direction of adhesions.

upper part of the cæcum, the line B. indicating the peritoneum covering the gut and the adjacent portion of the abdominal wall external to it, while the line A. shows the position of the muscular and mucous coats. The arrows C. show the direction in which fixation takes place, the adhesions beginning at the reflection of the mesentery from the outer wall of the bowel. These adhesions may exert such a strain on the bowel as to reduce its calibre very materially, especially at certain points. This is much exaggerated by any distension of the bowel below a constriction, and may be so great that the intestine becomes occluded at this point. Such an obstruction exists occasionally in the large bowel on the right side at the level of the iliac crest, where the abrupt change from a firm, bony relationship to that of a flaccid muscular wall renders the production of a kink more easy.

Fig. 2. represents a transverse section through the sigmoid and meso-sigmoid and the peritoneum covering the iliac fossa external to the meso-sigmoid. As in the last diagram, the line B. indicates peritoneum, and the line A. the bowel. Owing to the possession of a mesentery of some considerable length, the bowel is at a much greater distance from the abdominal wall than the cæcum and ascending colon, which are immediately adjacent to it, and the mode of fixation differs somewhat in detail from the last described. The outer surface of the mesentery is gradually brought down to its base by the formation of adhesions till the sigmoid itself becomes secured to the floor of the fossa. The mode and direction of the formation of these adhesions are represented by arrows C.

Associated with the progressive fixation of the sigmoid loop there is a diminution of its lumen and of its length, so that the bowel, which normally forms a loop of considerable size, moving freely at the end of a long mesentery, finally becomes telescoped as a short, straight, constricted tube attached by a considerable area of its circumference to the abdominal wall quite devoid of any mesentery. In proportion as the bowel becomes fixed and unable to perform its functions with freedom and facility, so its muscular coat wastes. This state of fixation and shortening of the sigmoid flexure, with wasting of its muscular coats and obliteration of much of its peritoneal covering,

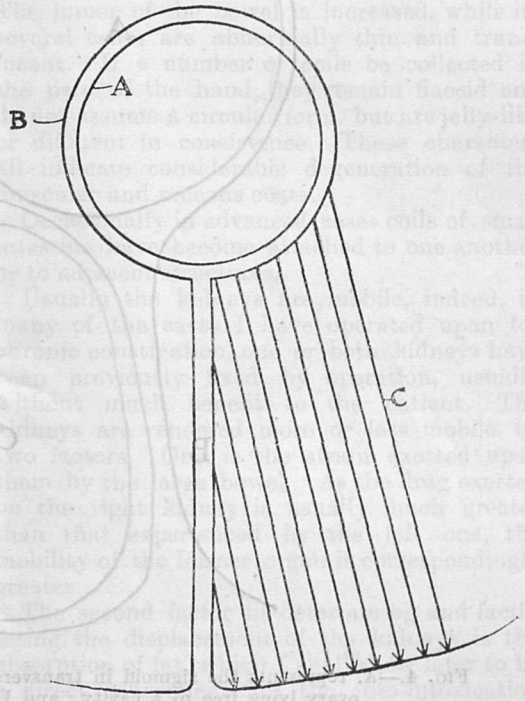

Fig. 3.—A. Muscular and mucous coats; B. Peritoneum; C. Direction of adhesions.

is of great importance surgically, since it renders any operation on this portion of the bowel abnormally difficult.

The left ovary and Fallopian tube are often involved in these adhesions, and the ovary occasionally shows cystic degeneration. As it increases in size it forms a space in the mesentery in which it moves, its outer wall and the lining of the space enclosing it re-acquiring a peritoneal covering.

By its growth it destroys those adhesions which attached the meso-sigmoid, leaving a mesentery connecting the sigmoid itself to the abdominal wall. It is clear that as the tumour increases in size it must also subsequently destroy the residual mesentery and become free except for its attachment to the broad ligament. How far the fixation of the left ovary in adhesions is responsible for the cystic degeneration it undergoes you must judge, but the association of the conditions I have described I have seen and demonstrated on numerous occasions.

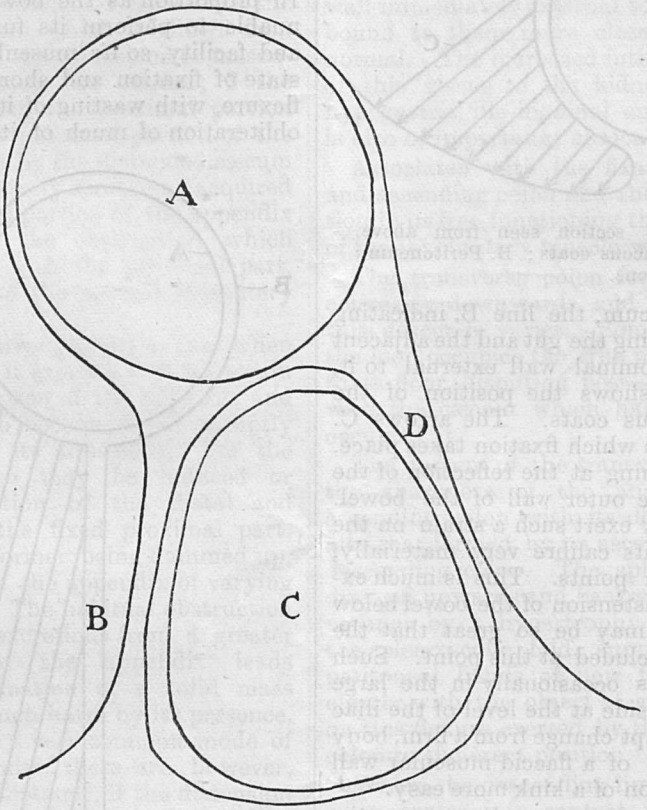

Fig. 4.—A. represents the sigmoid in transverse section; B. the original mesentery; C. the cystic ovary lying free in a cavity; and D. the remains of the acquired adhesions.

In a small proportion of cases the sigmoid, instead of becoming shortened, atrophied, constricted, straightened, and fixed, becomes very much elongated, more dilated, and more mobile than normal, its muscular coat being correspondingly hypertrophied. A certain amount of obstruction to the passage of fæces from the sigmoid into the rectum is present, since, when sufficiently elongated, the loop twists on itself of necessity. It is in these cases that complete intestinal obstruction may occur, owing to the twist or rotation of the overloaded and elongated loop becoming sufficient to prevent the passage of any material from the sigmoid loop into the bowel beyond. It will thus be seen that the so-called volvulus of the sigmoid (occurring spontaneously and not as an after-effect of an abdominal operation) is a phase of a condition of partial obstruction of long standing, the loop being habitually over-distended with intestinal contents, and the passage of fæces from it being chronically interfered with. I do not think that acute volvulus of a perfectly normal sigmoid can occur suddenly spontaneously. The same remarks apply equally to volvulus of the cæcum.

The rectum is usually elongated, dilated, and free from any abnormal adhesion. Its muscular coat is hypertrophied.

Fig. 5 represents diagrammatically many of the changes which the large bowel undergoes in consequence of the habitual interference with its functions by constipation. The normal condition is shown as a dotted line, while the firm

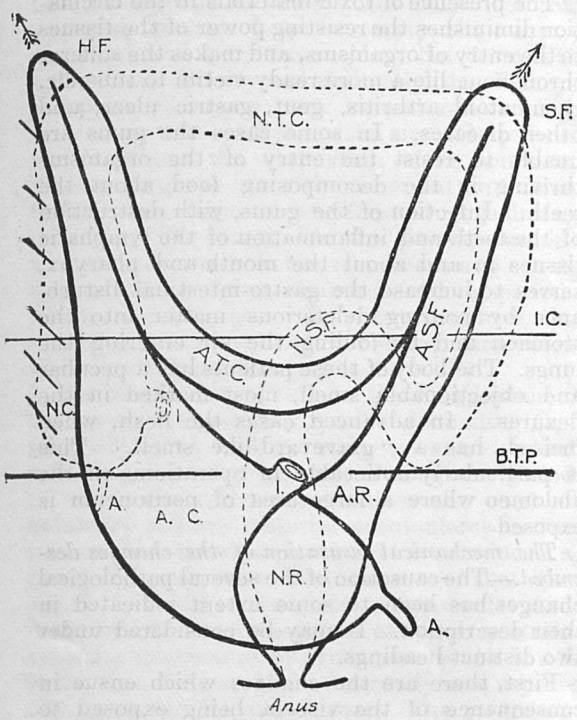

Fig. 5.

outline illustrates the modifications which take place in consequence of habitual overloading. N.C., N.T.C., N.S.F., and N.R. indicate what may roughly be regarded as the normal cæcum, transverse colon, sigmoid flexure and rectum, while A.C., A.T.C., A.S.F., and A.R. represent these parts in their altered state. B.T.P. and I.C. show the lines of the brim of the true pelvis and of the iliac crests. The appendix is left free from adhesions or deformity, so as not to render the diagram too complicated.

The stomach shows changes that vary with the degree of descent of the transverse colon. It becomes dilated, its greater curvature reaching to an abnormally low level. Its upper margin is sometimes retracted beneath the liver and ribs by a thickened and contracted lesser omentum, while at other times the lesser omentum is stretched, thinned and elongated, so that the lesser curvature to the left of the pylorus occupies a position which is very much lower than usual. This retraction is most marked about the pylorus, which, with the commencement of the duodenum, is occasionally attached to the under surface of the liver and gall bladder. When the lesser omentum appears to be shorter and denser than usual, this contraction is most marked about its free margin, where it may be supplemented by an acquired mesentery which attaches the pylorus and adjacent duodenum to the liver and gall bladder. Even when the lesser omentum is elongated the pylorus is usually fixed much more intimately to the liver than in the normal subject.

The posterior surface of the stomach is sometimes attached to the peritoneum covering the pancreas and adjacent structures.

The small intestines show changes which are most distinct as they approach the cæcum. The lumen of the bowel is increased, while its several coats are abnormally thin and translucent. If a number of coils be collected in the palm of the hand they remain flaccid and do not assume a circular form, but are jelly-like or diffluent in consistence. These characters all indicate considerable degeneration of the muscular and mucous coats.

Occasionally in advanced cases coils of small intestine have become attached to one another or to adjacent structures.

Usually the kidneys are mobile, indeed, in many of the cases I have operated upon for chronic constipation, one or both kidneys have been previously fixed by operation, usually without much benefit to the patient. The kidneys are rendered more or less mobile by two factors. One is the strain exerted upon them by the large bowel. As the drag exerted on the right kidney is usually much greater than that experienced by the left one, the mobility of the former organ is correspondingly greater.

The second factor in determining and facilitating the displacement of the kidneys is the absorption of fat, which I shall show later to be a direct consequence of the auto-intoxication produced by intestinal stasis.

Progressive loss of fat and the increasing staining of the skin are perhaps the most marked objective features of this form of poisoning. They combine especially to produce that appearance of premature age so characteristic of faulty intestinal drainage.

The rapid loss of fat and an associated degeneration of the muscles and other tissues are responsible for many other troubles. All the viscera of the abdomen are very much affected, losing their support, and resulting in a

condition commonly described as proptosis. Obstetric disabilities, for which complicated titles have been provided in abundance, are the direct result of the absorption of poisonous products from the intestinal tract. The loss of fat appears sometimes very abruptly, as if the tissues of the individual had continued for a long time to offer a sufficient resistance to the influence of the poisons, and then suddenly gave up the struggle. In other cases the patient becomes gradually thinner. The skin is thin, sticky, and inelastic, and abnormally dark and dirty-looking. The staining of the skin is partly general and partly local. It is at first a transitory feature and disappears, with free purgation. Popularly the person is described as being "off colour" or "bilious." I would point out in passing that the liver, probably from its bulk, has been blamed for much of the trouble produced by the faulty mechanics of the intestines, and drugs which hasten on the contents or possess antiseptic qualities are given with the view of affecting that organ. I need only refer to mercury as an excellent example of this class. In operations for gall-stones I have always found most definite evidence of defective intestinal drainage, suggesting that the infection of the ducts of the liver results from a damming back of organisms in a portion of the canal they do not normally inhabit.

This explains the benefit that so frequently follows in cases of inflammation of the gall-bladder, with or without gall-stones, upon the stimulation of the passage of material through the intestines or its sterilization by drugs, such as olive oil, calomel, etc.

Later the skin becomes permanently dirtier than normal, the tinge varying, however, with the degree of toxicity of the sufferer. Besides this general pigmentation, we find areas of exaggerated pigmentation corresponding usually to such surfaces as are exposed to friction, or are normally dark. For instance, the skin of the labia and anus, the lower margins of the folds of the axillæ, the skin covering the spines of the lumbar vertebræ, especially in women, the neck, the lower eyelid, and the area below it, the inner portion of the eyelids, and the prominent parts of the cheek and temple show this pigmentation in a very marked manner. The conjunctiva is also stained, first temporarily and then permanently, the colour varying in depth.

The presence of the distended and inflamed cæcum in the true pelvis interferes with the efficient performance of the functions of the ovaries and Fallopian tubes, and may produce adhesions of the tubes or ovaries. The breasts undergo a cystic change at an early period. In this way the intestinal stasis and the conditions associated with it are responsible for much of the sterility of women.

The presence of toxic materials in the circulation diminishes the resisting power of the tissues to the entry of organisms, and makes the sufferer throughout life a more ready victim to tubercle, rheumatoid arthritis, gout, gastric ulcer, and other diseases. In some cases the gums are unable to resist the entry of the organisms thriving in the decomposing food about the teeth. Infection of the gums, with destruction of the teeth and inflammation of the lymphatic tissues in and about the mouth and pharynx, serves to increase the gastro-intestinal disturbance by pouring deleterious matter into the stomach and by fouling the air entering the lungs. The body of these patients has a peculiar and objectionable smell, most marked in the flexures. In advanced cases the flesh, when incised, has a "graveyard-like smell." This is particularly noticeable in operations on the abdomen where a large area of peritoneum is exposed.

The mechanical causation of the changes described.—The causation of the several pathological changes has been to some extent indicated in their description. It may be considered under two distinct headings.

First, there are the changes which ensue in consequence of the viscera being exposed to mechanical conditions other than normal in the process of evolution.

Secondly, we have to deal with the several degenerative processes which ensue on account of the absorption of toxic materials from the gastro-intestinal tract.

I have made it clear that the factor determining the several changes is an overloading of the large bowel, and especially of that portion which serves more especially as the cesspool of the gastro-intestinal tract, namely, the cæcum and ascending colon.

The excessive distension of this portion of the tract results very largely from the habitual assumption of the erect or sedentary posture during the greater part of the 24 hours in civilised communities. The mechanical interference resulting from this is exaggerated in the woman by the constriction of the waist, and by the imperfect development of the abdominal muscles, both due in great part to the use of stays. In the act of defæcation in the sedentary posture, the cæcum and transverse colon are driven downwards and forwards into the true pelvis,

tending to drag and displace downwards both kidneys, and especially the right, the individual losing in this attitude the pressure afforded by the forcible apposition of the thigh and abdomen which is exerted when the squatting position of uncivilised life is assumed. Not only does this squatting posture help to empty the cæcum, ascending and transverse colon, but it tends to retain, both directly and indirectly, the kidneys and other viscera in their normal relationship. It also serves to displace the sigmoid upwards and facilitates the evacuation of its contents. It also removes all risk of hernial protrusion through the inguinal and femoral rings during straining. In savage life the postures are infinitely more varied, the recumbent and squatting attitudes being assumed for long periods during the daytime. In many countries the squatting posture is employed during micturition as well as during defæcation.

The overloading affects, in the first instance, the cæcum and ascending colon distending this sac, stretching and possibly to some extent inflaming its serous coats. During the period in which the individual occupies the erect or sedentary posture material accumulates in the cæcum and ascending colon. It produces a gradually progressive distension, so that the cæcal extremity descends downwards and inwards into the true pelvis and exerts strain upon the attachment by peritoneum of the bowel to the iliac fossa and loin externally, and especially upon the hepatic flexure. The strain on the flexure in this position after a time renders it difficult or impossible for fæcal matter to pass the flexure. The interference with the lumen of the bowel at the flexure is increased if there is also a quantity of material accumulated in the transverse colon. After a time material discharged from the small intestine into the cæcum and ascending colon continues to occupy and distend these portions of the large bowel during the whole day, and it is only when the supine position is assumed at night that the mechanical conditions render the flexure pervious, and gravity assists in their evacuation. The same applies in a lesser degree to the splenic flexure.

I have already shown elsewhere that whenever such a condition arises in the body as can be benefited by the formation of a new mechanism or the modification of an already existing one, such an arrangement develops. Perhaps the best instance of this that I can point to is the buttress which develops on the lateral mass of the atlas of the shoemaker, and which forms a new joint with the jugular process of the occipital bone. ("The Anatomy and Physiology of the Shoemaker," Journal of Anatomy and Physiology, July, 1888). In the case of the vertical and transverse portions of the large bowel the strain is distributed along the adhesions and bands which extend from the outer surface of the transverse colon to the vertical portions, and from them to the adjacent abdominal wall, fixing them and pinning the flexures abnormally high up in the loin. Inflammation may ultimately play a part in the formation of these adhesions, but it is not solely responsible for their presence, as if it were, the inflamed bowel would form adhesions to all structures in contact with it and not merely where strain can be most effectually met by the formation of resisting bands. As the proximal portion of the appendix is a part of this section of the large bowel it becomes a point of attachment for adhesions or bands which support the lower limit of the bag. For the same reason the end of the ileum becomes fixed by acquired bands to the brim of the pelvis, so helping to oppose the descent of the large bowel. Unfortunately the formation of this pathological mesentery for the appendix exerts a similar influence to that seen in the splenic and hepatic flexures, and the exit of material from the distal free portion of appendix is obstructed with much more serious local results.

The transverse colon draws upon the stomach tending to pull it downwards. This tendency is opposed by the thickening up and shortening of the right margin of the lesser omentum, supplemented by the formation of bands or adhesions, which extend from the under-surface of the liver to the upper border and anterior surface of the pylorus and adjacent portion of the duodenum, which hold up and fix those structures at an abnormally high level. Adhesions between the gall-bladder and the pylorus are the result of the same strain. They commence about the neck of the gall-bladder and extend progressively forwards over its surface.

In consequence of the drag exerted by the bowel on the convexity of the stomach and the upward displacement and fixation of the pylorus, this organ experiences a progressive difficulty in emptying its contents while the erect position is assumed and dilatation ensues. The coats of the stomach become more or less inflamed, the posterior wall of the stomach forms adhesions to the structures adjacent to it. Ulceration of its mucous coat is not uncommon. A knowledge of these facts helps to explain the benefit experienced by cases of dilated stomach who are treated by being

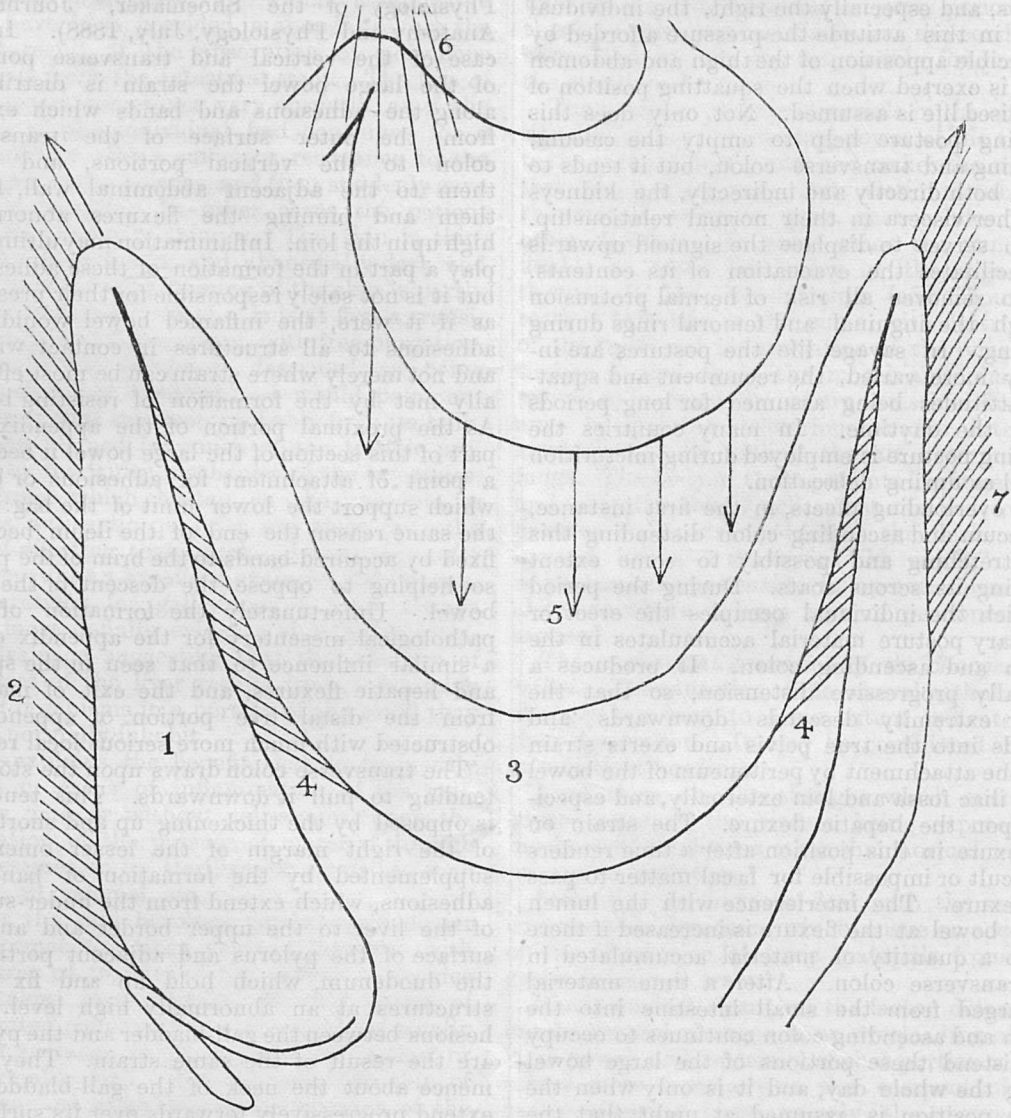

Fig. 6.

retained in such a position that this viscus is freed from the strain exerted upon it by the large bowel. It seems to me that there is much obscurity as to the causation of dilatation of the stomach as well as of many digestive changes, for the reason that the more simple mechanical aspect of the condition is neglected, while the more elusive chemical results of such processes are pursued instead.

I have already called your attention to the liability to ulceration of the stomach of patients suffering from intestinal stasis.

In cases which I have operated on for gastric ulcer, either because of pain, hæmorrhage or perforation, I have found the stomach dilated and often hypertrophied, together with all the changes which I have described, as consequences of chronic constipation. As a further proof that the ulceration of the stomach is secondary to interference with the passage of material from it, I would remind you of the success which almost invariably follows upon the removal of the obstacle by the effective drainage which is afforded by gastro-enterostomy.

It is not improbable that the toxic condition present renders the mucous membrane less resistant than normal to the irritating action of the contents of the stomach delayed for too long a period in it.

Fig. 6 represents—(1) The dilated cæcum and ascending colon, with the appendix involved and distorted by the lower limit of the adhesions (2) which fix this section of the large bowel. (3) The elongated and dilated transverse colon with the acquired mesenteries (4) between it and the ascending and descending colon. These serve to transmit to the vertical portions of the large bowel much of the weight of the transverse colon. The remainder of the strain exerted by the transverse colon is exerted along the great omentum (5) to the greater curvature of the stomach. This strain is also met partly by the acquired adhesions (6) which overlap and hitch up the pylorus, and partly by the adhesions 2 and 7, which fix the ascending and descending colon respectively.

(*To be continued in the next issue.*)

Dental News.

Notes of a Clinical Lecture on Bridgework, by Mr. Percival S. Campkin, March 4th, 1906.

(*Continued from the last issue.*)

Occasionally a case presents itself for treatment, where a considerable recession of gum has taken place, or the crown is unusually bulbous. To adapt an entire cap on teeth of this description may require so much excision of tooth substance that previous devitalisation is necessary. In some cases, however, a half-cap may be adapted with good results, and so the pulp is saved. The lines of the various attachments must correspond, and the direction of these lines chosen that will necessitate the smallest amount of cutting; a molar may be tilted somewhat forward—the bicuspid in normal position. Then the mesial wall of the molar will require more disking than any other part. The insertion of small bridges of three to four teeth will give the most satisfactory result. We must bear in mind that all strain is thrown immediately on to the abutments—the material absorbing practically none. Personally I have but little faith in the fixed bridge involving the entire arch—and in cases of this kind prefer to treat by the insertion of three or four small bridges, or if, owing to destruction of remaining roots, this is not practicable, then to insert a removable bridge plate. Even with an apparently sufficient number of abutments, these entire arch bridges seem to fail, and I believe an important cause is the unnatural continuous strain to which all the attachments are subjected. For instance, the chief strain normally thrown on a superior central incisor is from below, forwards and outwards—an incisive action only. A molar more firmly implanted is subjected to much more varied strain during mastication of food. The two, if bridged together, have no rest, the incisor root participating in the masticating strain of the molar, and it is no great wonder that sooner or later one or other of the roots become overworked, and eventually rendered useless.

Therefore, wherever possible, select the roots for bridgework in functional groups. For instance, to treat the following case: Roots. 7 | 4 | 3 | 1 | | 1 | 3 | 5 | 7 | 8 Roots. Roots. Roots. by bridgework. A series of small bridges will give, as a rule, more permanent and satisfactory results than the insertion of the entire arch in one piece. To group the above teeth and roots as suggested, so that the ultimate strains on the abutments will be as physiological as possible, will require the insertion of four separate bridges, as follows: (1) 7 | — 4 | ; (2) 3 | —11 | ; (3) | 1 — | 3 and (4) | 5 | 7 | 8 .

Of the value of the different roots as to their strain-bearing capacity, Evans suggests the following:—

1 central will carry 2 teeth, with spurs 3.
2 centrals ,, ,, 4 ,, with spurs.
2 canines and central will carry 6 teeth.

In certain cases two canines will carry the six.

One molar and bicuspid either side, with intervening roots, will be sufficient to carry a bridge between one right and one left molar, and a canine will sustain it for the intervening arch.

It appears to me that in the majority of cases the above is rather over-estimating the strain-bearing capacity; in certain cases it is desirable to apply a removable bridge. The advantages of this method are greater ease in obtaining perfect cleanliness and of repair should a porcelain face fracture. The disadvantages being a greater absorption of time and, incidentally, consequent upon this, a greater expense to the patient.

Also in small bridges at the back of the mouth the method is not so applicable owing to lack of space—moreover, in this position, fracture is very unlikely to occur. A removable bridge is most desirable when involving anterior teeth or in large spaces, when a certain amount of strain may be taken by the alveolar margin. Methods of retention of removable bridges are double cap crowns—split posts and tubes, blades and slots—lugs, etc.

(*To be continued in the next issue.*)

NOTICE TO CORRESPONDENTS.

The Editor wishes it to be understood that no communications can be inserted which are not guaranteed by the name of the sender. All articles must be written on one side of the paper only.

The Primary.

It was interesting to compare our Primary Fellowship Class with the "Ten little Nigger Boys" of the poem. We started ten strong and dwindled down to five by the beginning of the exam. and less, alas, by the end. Of course we all cursed volubly after the Phys. paper—if we had pluck enough left in us. Then we smiled sardonically and declared the jest an excellent one. We were prepared for anything ordinary, but not to deal with work as yet unpublished in our mother tongue. We felt that we were mere puppets,

> "That come and go
> At the bidding of vast formless things."

Anatomy revived us somewhat. John was heard to say that "the dear boys didn't know much about the cerebral veins," so, supposing you are one of our little band, you rather fancy you have scored. Having read up the carpal bones with their development, and reminding yourself that "Coco comes before Occo," imagine yourself going in for the final ordeal—the vivas. You go up, subdued or scintillating as your nature may be, and, if you have done any ward work, fortified with a double dose of Mist. Acidi. Sooner or later you get into the familiar room and find yourself beaming on John, who beams on you, while you wish he could examine you. Presently a tall man in a white coat comes up, takes you tenderly by the arm and lispingly invites you to look at some brains. You jog along somehow till you are shown an opened knee-joint. Here you get rather tied up, and can think of nothing but a tip for something remote or a particular bend in the road on your yesterday's cycle ride. John mercifully leaves you while you pull yourself together.

Next, bones: you politely accede to a request to articulate a superior maxilla with a sphenoid. After failing to make things meet, it strikes you that you have been had. You have forgotten our old friend Mozes—spelt with a z, mind you, or you will go hopelessly wrong. You gurgle with quasi-suppressed mirth at the examiner's joke, and he, being a Scotchman, is yours, body and soul, for the rest of the time, which passes pleasantly enough. Then Phys.—a delightful time which makes you think your paper must have been well away from the borderland, one side or the other. You will always look back on this viva as one of the rare occasions when you really did spread yourself. Only one check—when he asks you the minute anatomy of the gastric glands of the pig. This is not cricket, so you stare severely at the examiner and he goes on apologetically to another subject. The bell rings, and you realise that your fate is sealed and go downstairs with some complacency. You have some time to kill, and you stroll out into the gardens and wonder idly if your statue will ever be there with Hygeia weeping at your feet. If in desperate enough mood you may even go to the Cabin for tea. I spoke of the vivas as the final ordeal, but there is worse to follow. Shut up in the waiting room you abide your turn while the numbers are being called in slow monotony. With your heart alternately in your boots and your throat, you wish you had not been so cocksure that the apex did not shift in systole. After a time your turn unerringly comes, and you step forth as jauntily as a cursed aristocrat to the tumbril. A gentleman with silvery hair and clean-cut features stops you outside the door and asks if your name is indeed your own. You are too weak to argue the matter, so merely bow huskily. The words "You're through all right" come to you dimly out of space, and you totter to the door, through which you are guided by a considerate youth. Then a sea of faces as you somehow get down the steps. You seem to have a dozen hands which a dozen friends are eagerly shaking. All is over but the telegrams. You are too solemnly joyous for a theatre.

Novelties.

Medical History.

We have received from Mr. Henry S. Wellcome an advance copy of the programme of the proposed Historical Medical Exhibition to be held in London. This exhibition is being organised by Mr. Wellcome personally, and will be "strictly scientific and professional in character and not open to the general public." In an introductory letter, setting forth the objects of the exhibition, the organiser says, "It is my aim to bring together a collection of historical objects illustrating the development of the science and art of healing throughout the ages, . . . to trace in particular the origin of the use of certain remedial agents. Why were certain substances used in the treatment of disease? Was their adoption the result of study and practical observation, or was it more usually the result of accident . . . . I anticipate that the exhibition will reveal many facts, and will elucidate many obscure points in connection with the origins of various medicines, and in respect to the history of diseases. I shall greatly value any information sent me in regard to medical lore, early traditions, or references to ancient medical treatment in manuscripts, printed works, etc. Even though the items be small, they may form important links in the chain of historical evidence. Interesting information concerning quaint customs practised in connection with the healing art, and items of curious medical lore, may often be gathered from peasants and those living in country districts. Medical missionaries, and others in contact with native races, can also obtain particulars of interest. Every little helps, and as I am desirous of making the exhibition as complete as possible, I shall be grateful for any communications. . . . The greatest care will be taken of every object lent. All exhibits will be insured, and, if requested, packing and carriage both ways will be paid. It is my desire ultimately to place before the profession, in a collected form, all the information obtained."

It is proposed, subject to later alterations, to divide the exhibits into sixteen sections. The first section will contain paintings, illustrations, etc., of medical interest; the second, medical books, plates, pamphlets and incunabula of a rare or curious kind. The fourth, fifth and sixth sections will deal with medical, pharmaceutical and surgical curiosities. There will be special sections for ambulance and nursing curiosities, for the history of quackery and criminology, and for medical photography, while the last section will deal with adulteration in its protean shapes and forms. In fact, the exhibition will include everything even of remote bearing on the history of medicine.

An illustrated circular and full particulars of the proposed exhibition may be obtained on application to the organiser, Mr. Henry S. Wellcome, Snow Hill Buildings, London, E.C.

"Carl Zeiss, Jena."

We have received from the Carl Zeiss firm a copy of their new (1906) catalogue of microscopes and microscopical accessories. It would be superfluous for us to commend any of the instruments which this well-known firm has produced for the last fifty years and more; their merits are known to everyone who, while engaged in research work or in any other occupation which demanded the use of a thoroughly reliable microscope, has had the good fortune to be armed with a Zeiss. The superb "Stand I." which is catalogued in this list is one of those instruments which reflect every credit on the makers, and which give the maximum amount of satisfaction to the user. We find that it has been used at this hospital, and that it has given complete satisfaction. The catalogue, apart from its enumeration of instruments, prices and other details of interest to purchasers, gives an interesting account of the recent advances in microscopy. Particularly interesting, for instance, are the notes regarding the new objectives and oculars. Two new stands are listed, and there are various modifications and improvements in some of the older stands. It is important to notice, too, that the firm has been able considerably to lower the price of some of their instruments, retaining, at the same time, that high standard of excellence which has won the Zeiss apparatus such a well-merited reputation. As an example of this reduction in price we may cite the achromatic objectives. Last year the high power (twelfth) was catalogued 160 marks: in the present list it is 125 marks.

The London agency is at 29, Margaret Street, Regent Street, W., where types of the instruments may be seen and tried.

During the last few years systems of Physical Culture have become so numerous, and their individual claims so conflicting, that it is hardly likely that a new system will meet with much encouragement. Yet the latest which has been brought to our notice is so simple in its details, and so effective in its results, that it will probably win a large number of followers, particularly amongst members of our profession who have neither the time nor the inclination to devote themselves to carrying out the demands of the more complicated methods. On Thursday night Lieutenant Müller gave a demonstration of this, the new Müller system, to a private audience of medical and other professional men The system consists essentially in a combination of physical and breathing exercises, with simple massage and rubbing. The movements are simple and economical, both of time and energy, and are performed without apparatus of any kind. To judge from the demonstration which took place in the Strand Gymnasium on Thursday, it is a system which will certainly meet with the approval of those who desire a series of simple yet perfectly efficient exercises. Particulars of the system can be obtained on application to the Anglo-Danish Publishing Company, 188, Strand, W.C.

A few Notes from Gynaecological Out-patients.

Four Cases of Retroversion of the Uterus.

Case 1.—Married woman, aged 30, complains of a down-bearing pain and slight Leucorrhœa. She has had one child four years ago. The uterus is bent back and the cervix pointing downwards and forwards. No other lesion can be found; the vagina is of good tone and healthy. The uterus is easily replaced and a Hodge's pessary will most likely give complete relief.

Case 2.—Married woman, aged 25 years, complains of a constant pelvic aching, mostly confined to the sacral region. There is slight menorrhagia and a rather profuse leucorrhœa. She has had three living children, and three miscarriages during the last year and a half, the last three months ago. On examination, the uterus is large and bent backwards. When replaced it falls back again into Douglas's pouch. There are no adhesions and the ovaries are moveable. Here there is more difficulty than in case 1, because the body of the uterus is enlarged. The patient has not missed a period, there is no softening of the cervix or lower segment, or any other sign suggesting early pregnancy. A Hodge's pessary would most likely fail to keep a heavy uterus in position. No doubt the chronic congestion of the uterus is the cause of the abortion, and one must maintain the uterus in position to cure this tendency to abortion, as well as attempt to relieve the symptoms of the patient. The enlargement is most likely due to subinvolution, resulting from previous abortions, and the displacement prevents involution because of congestion. Now one must aim at reducing the weight of the uterus, and then apply a suitable pessary. The patient must be put to bed and the uterus curetted. When the diseased endometrium has been removed, the rest in bed, with the aid of ergot, will complete the involution of the uterus. A Hodge's pessary should be fitted, and since subinvolution is probably playing a prominent part in the chronic enlargement of the uterus, we can hope for a complete cure in about 6 to 9 months. If this palliative treatment fails the advisability of ventral hystropexy must be considered.

Case 3.—Married woman, aged 38 years, says she has had severe menorrhagia for a long time, and has lost count of the proper dates of menstruation, but thinks that her last period is now a week overdue. She complains of a sensation of a heavy weight about the pelvis. On examination, the vagina is very patulous, and a heavy, enlarged uterine fundus is felt low down in Douglas's pouch. The displacement is difficult to reduce, because the rounded fundus is held in the grip of the utero-sacral ligaments. On making a bimanual examination the uterus is found to be about the size of a two months' gestation, and feels rather increased in its antero-posterior diameter. It is not tender, and there are no adhesions binding down the fundus. Here we must be very careful to find out whether the enlarged uterus contains an ovum or whether the enlargement is due to simple congestion. One often sees a sound used as a routine method of examination in gynæcological practice. The sound is to be used only when a bimanual examination fails, and even then it must be used with extreme caution. No instrument has been more abused than the sound. If you put a sound into an enlarged retroverted uterus it will, in most cases, only tell you what you know from your bimanual examination. In our patient there is also a suspicious boggy feeling about the uterus, and, although the patient does not think she is pregnant, and breast signs are absent, we will diagnose a retroverted early gravid uterus. This uterus goes up into position after considerable manipulations. This is rather characteristic of a pregnant uterus which does not, as it were, reduce as a whole on account of its boggy soft nature. The correct treatment is to make the patient rest in bed, and, if possible, reduce the displacement later on. A gravid uterus nearly always rights itself spontaneously in time, but the patient must not be about and at work. There is the risk of abortion, and, later on, at about the fourth month, the danger of incarceration and bladder trouble. With rest in bed, and after replacement, a pessary may perhaps help to keep the uterus in position.

Case 4.—Married woman, aged 30, sterile, complains of more or less chronic pain, much increased in severity before her periods, which are profuse. She also complains of a slight yellow discharge. On examination the uterus is retroverted, and on the right side there is a rounded fixed thickening. It is noted that the uterine body can be lifted up to a certain degree, but the patient complains of great pain during these manipulations. The uterus, when released, at once falls back into its misplaced position. In other words, the uterus is bound down by adhesions, and when one pushes it up, the

adhesions are stretched and pull on the rectum behind. We may conclude that soon after marriage patient had an attack of salpingitis and mild plastic peritonitis. She is sterile, because the tubes are closed and bound down by adhesions. A pessary is absolutely contra-indicated. One must direct one's attention to the peritonitis and not to the displaced uterus. The patient must rest and be treated with hot douches and glycerine tamponing. The adhesions may absorb under this treatment, but if the patient cannot afford to lead an invalid life for the time being, she must submit to operation, which will consist in the removal of the tubes (not the ovaries), and in maintaining the uterus in an antiverted position by ventral fixation.

A Case of Hydramnios.

A married woman, æt. 32, who has had three living children and four stillborn at full term, comes complaining of pain and shortness of breath. She is now seven months pregnant. The last child was born dead with marked hydrocephalus.

On examination the uterus reaches up to the ensiform cartilage and is very tense. A well-marked thrill can be obtained in all directions. The patient measures about forty-two inches round the umbilicus, instead of about thirty-two at the seventh month. She says that she almost suffocates on lying down, because of the feeling of tightness which she first noticed a fortnight ago, and is getting rapidly worse.

Diagnosis.—The swelling is uterine, the thrill goes in all directions, and there is no groove to suggest the presence of an ovarian cyst in addition to a pregnant uterus. The uterine muscle can be felt to harden over the cystic swelling. We have therefore a distended uterus in the later months of pregnancy, and as the condition is obviously not due to hæmorrhage we will diagnose hydramnios.

Now think of the pathology of hydramnios. We do not know the cause, but we know that fœtal defects and deformities, spina bifida, hydrocephalus, anencephalus, ascites, etc., are often associated with it. So let us examine the fœtus. It is alive, because we can feel it moving and can hear the distant fœtal heart sounds below the umbilicus in the middle line. We have to settle next if there are two fœtuses, because twins are frequently complicated by hydramnios, and if so they are developed from one ovum and are generally both girls. The last child was hydrocephalic, and the mother will be anxious to know if the present child is hydrocephalic too. We can only make out one head and one fœtal heart, and the head is low down and not enlarged. We can therefore say that there is only one fœtus, and that it is not hydrocephalic.

What is the prognosis and what is the treatment?

There are cases of very acute distension due to increased amount of fluid. This case is not so very acute, but the patient already complains of pressure on the diaphragm. Labour may come on prematurely on account of the tension, but if this does not occur and the fluid increases rapidly, some authorities advise that the membranes should be incised by a valve-shaped opening some way up above the internal os. The liquor will gradually drain off, and possibly labour will not be induced and pregnancy go to term. I saw a case of hydramnios a little time ago which had been mistaken for ascites, the abdomen had been tapped twice and over four pints had been drawn off. The uterus filled up to the same tension within three days. I do not therefore suppose that valve-shaped openings can do much good, and each case should be treated according to the amount of uterine distension and distress.

If the distress is great the membrane should be ruptured with a view to bringing on labour. Labour will be slow, and there will be a tendency to hæmorrhage on account of inertia and atony of the uterine muscle.

H. T. HICKS.

Change of Address.

Dr. J. C. O. Bradbury, from The Victoria Hospital, Folkestone, to Darenth House, Sandgate, Kent.

Dr. H. W. Collier, from Guy's Hospital to 24, Dyke Road, Brighton.

Mr. Herbert P. Hooper, L.D.S. Eng., from Poole Road, Bournemouth, to 28, New North Road, Huddersfield.

Dr. Frank J. Lidderdale, from the Grove Hospital, Tooting, to 4, London Street, Folkestone.

Dr. J. C. S. Peatson, from 14, Brynmaer Road, Battersea, S.W., to "Castlenau," 211, London Road, Croydon.

Mr. W. B. Secretan, F.R.C.S., from "Corrignafearn," South Croydon, to 162a, Castle Hill, Reading.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Dramatic Performance in aid of the Million Shilling Fund.

On Wednesday, April 11th, a most excellent dramatic performance was given at St. George's Hall by a company of amateurs, under the direction of Mr. Gerald Kerin, in aid of the Million Shilling Fund.

The house was fairly well filled. It is to be regretted, however, that but few Guy's men lent the encouragement of their presence to workers in so admirable a cause. A triple bill was produced, the pieces being, "In the Eyes of the World," "The New Sub.," and "The Tryst," the last named being a maiden effort from the pen of Mr. Gordon Edwards, and by no means the least meritorious of the three.

The performance reached a very high standard throughout. Miss Elsa Catler was well suited by the sympathetic part of Lady Mabel Wendover in "In the Eyes of the World," but did not show to such good advantage in "The New Sub." as Mrs. Dartlington. Mr. G. Wykehame Kerin, as Richard Coulton, was excellent, his restrained acting being a good foil to the loud vulgarities of his objectionable visitor. In "The New Sub.," Mr. Kerin again appeared, and played the part of a middle-aged soldier in love, with the necessary amount of tenderness. In the first piece, Mr. Lewin Sultan acted with great skill, for, as a drunken snob, he had a part which might easily have been overdone. The several military parts in "The New Sub." were well sustained by Messrs. G. Myers, Alfred Cutler, Cecil Sultan, Charles Kerin, Leopoldt Spero, Lewin Sultan, and, lastly, Mr. E. Beale Bantock, whose Irish accent would not have disgraced a native of the Emerald Isle. In "The Tryst," Mr. Edwards has taken for his subject a plot somewhat akin to Anstey's "The Giant's Robe." Richard Desborough, ill and penniless, arrives at the house of his old playmate and love, Mildred Wentworth, on New Year's Eve; he is almost blind at the time and does not recognise her. Harold Woodward, who is in the house at the time, has just proposed for Mildred's hand, he being the author of "The Tryst," the book of the year, and she struggling to become known as a singer. She has put him off for a week in the hope of Dick turning up as he had promised. A quotation from "The Tryst" suddenly rouses Dick from his stupor; he recognises the words as his own and Woodward as the man who has stolen his brains and novel. Taxed with this, Woodward attempts to bluster, but finally owns his crime and leaves the house. Millicent, in a touching scene, reveals her identity to Dick by singing an old love ballad, and the curtain falls on their complete happiness. Miss Ethel Stuchbury gave a rendering of Mildred Wentworth that could not have been improved upon. Mr. Edwards was naturally at his very best in a part of his own creation, while Mr. Lewin Sultan handled the somewhat ungrateful part of Harold Woodward with success.

It says much for the unflagging energies of the many fair ladies who exercised their persuasive powers in the sale of programmes, sweets and flowers at charitable prices, that a by no means inconsiderable portion of the proceeds was due to their efforts.

Pass List.

Second Conjoint Examination, April, 1906.

M. M. Adams, H. R. Bastard, S. H. Browning, D. C. Druitt, V. P. Hutchinson, P. J. Kolaporewalla, H. R. Mullins, M. A. Rahman, H. I. Shahin, A. D. Vernon-Taylor, C. A. Wood.

First Conjoint Examination, April, 1906.

Chemistry and Physics.—D. C. Lloyd, C. E. Reckitt, H. G. Spain, W. P. Vicary.

Elementary Biology.—F. S. D. Berry, H. G. B. Blackman, L. C. W. Cane, A. C. L. D'Arifat, H. W. Doll, A. M. Henry, W. M. Langdon, H. O. Salt, A. L. Saul, M. C. Wall.

Practical Pharmacy.—W. W. Cook, F. C. Endean, M. Leckie, E. Morgan, H. H. Moyle, R. P. Rowlands, H. E. H. Tracy, I. Valerio, R. Willan.

Royal College of Surgeons of England, March, 1906.

LICENCE IN DENTAL SURGERY.

Preliminary Science Examination.—E. J. Archer.

Appointments.

Civil.

Binns, H. Theodore, L.D.S. Eng., has been appointed Hon. Consulting Dental Surgeon to the North Riding Infirmary, Middlesborough.

Hicks, H. T., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Samaritan Free Hospital for Women.

Hodgson, Stanley, M.D., B.S. Lond., M.R.C.S. Eng., has been appointed Medical Officer to the South Salford Division of Manchester.

Wyand, E. H., L.D.S. Eng., has been appointed Dental Surgeon to the Troops at Aldershot.

Military.

Surgeon-Lieutenant Francis E. Fremantle, M.Ch., F.R.C.S., Herts Imperial Yeomanry, is promoted to be Surgeon-Captain.

The Year's Work.

THE HOSPITAL FINANCES.

"And my mind and will is, ... they my said Executors and last mentioned Trustees . . . shall and do, out of the residuum of my estate, or the rents, interests, or other profits thereof, carry on, erect, finish, and fit up the two new squares of buildings in Southwark, by me some time since began, and intended for an Hospital for reception of such sick Persons as are herein mentioned: and such other erections, offices, and buildings, as shall, in the opinion of my said Executors and Trustees, be for that purpose further necessary: and also provide and furnish the same with beds and all other conveniences for the reception of, and receive and entertain therein, four hundred poor Persons, or upwards, labouring under any distempers, infirmities, or disorders, thought capable of relief by Physick or Surgery."

Extract from Will of THOMAS GUY.

We have progressed since the days of our founder: progressed and advanced perhaps immeasurably beyond his dreams when he calculated on a hospital of four hundred odd beds. It is unnecessary to recount the history of the past two hundred years of Guy's Hospital to Guy's men. It ought to be a tale of advancement as familiar to us all as the story of the house that Jack built. Yet there is one side of the story that will bear repetition, one phase that indeed needs constant and continual repetition, if not to Guy's men, then to those who have not had the opportunity of personally noting the difficulties with which our Institution has had to struggle, and that is the financial side. The £220,000 that Guy left, the residuum which was invested, in terms of his will, in agricultural estates, has dwindled to one half. It is true his example has brought other donations into the Hospital treasury, such as Hunt's magnificent legacy, but it is true also that we have had to appeal, and are still appealing, for funds to carry on the work that he started, and that there is still wide scope for those who are desirous of following his example. The record of our financial advancement during the past year, a full statement of which is to be found in the Report of the Hospital, now in the Press, will therefore be of interest to all.

Let us see what the Treasurer says. "In reviewing the history of Guy's Hospital for 1905," writes Mr. Cosmo Bonsor, "prominence must be given to the Appeal for Funds issued to the public on the 27th March, but even the importance of that event and its results should not be permitted to obscure the recognition of a year's work of record magnitude. The text of the Appeal, together with the Treasurer's covering letter to the Press, ... will hold good until the urgent requirements it sets forth receive complete satisfaction. It was, perhaps, too great a thing to expect the whole of the required assistance to be provided forthwith, and the response to date is but an instalment. Yet enough has been done, in the main by a small body of old and generous friends, to give grounds for hope that the great effort inaugurated by His Majesty The King and the late Mr. Gladstone, eleven years since, is nearing its realization, and that never again will the Hospital of Thomas Guy have to close a bed, or reduce in the least degree its present splendid service to humanity."

As an introduction this is comforting, and when we come to the detailed Financial Report we find that it does indeed give that ground for hope to which the Treasurer alludes. Readers will bear in mind that the Appeal concerned two points. Firstly, there was an appeal for £100,000 wherewith to clear the Hospital from debt, and secondly for augmentation of ordinary income to the extent of £15,000 per annum. The Governors decided to let the merits of the case be its own recommendation, and at a special Court of Governors, presided over by Lord Revelstoke, a sum of £33,000 was subscribed. At the close of the year £57,146 11s. 6d. had been received or promised in response to the appeal. This sum included £3,465 3s. contributions to the Million Shilling Fund, and a special donation of £3,000 from the Council of King Edward's Hospital Fund. When one scans the list of major contributions, one is struck by the fact that of this total about £49,000 came "from only 139 contributors." "Thank Offering" gave £5,000, Mr. Alfred Beit £4,000, Messrs. N. M. Rothschild £3,000, the Members of Lloyds £2,584 13s., Mr. Robert Flemming £2,000, Lord Revelstoke £1,000, the Bank of England £1,050—and so the list goes on, closing with a contribution of £500 from the Drapers' Company.

"With the means thus generously provided, the Governors had the gratification and relief of paying off the loan from the Bank of England, £38,000, and of reducing indebtedness to the Re-Endowment Fund by £10,000."

Coming to Income and Expenditure, we find that the income of the Hospital during 1905, both from ordinary and extraordinary sources, amounted to £117,598 18s. 1d. Against that stands an expenditure, ordinary and extraordinary, of £116,945 8s. 3d., leaving a balance to the good of £653 9s. 10d. From property under the Founder's Will the Hospital derived £28,844 1s. 3d., from annual subscriptions, £3,877 3s., from ordinary donations £3,026 1s. 5d., from legacies £7,100 12s. 1d., from patients' payments £4,697 12s. 2d., the balance of income being made up by the funds derived from the grant from the King Edward Hospital Fund (£5,000), repayment of income tax, Hospital Sunday and Saturday contributions, dividends from the Re-Endowment Fund, and from the donations in response to the Appeal. It is interesting to note that there has been "a further substantial expansion in the income derived from Guy's endowment, the contributing factor again being the Lincolnshire Estate. Legacies were considerably more in amount, and annual subscriptions, patients' payments, and paying probationers' fees slightly increased."

Among the items of extraordinary income may be mentioned a sum of £500 from "a Guy's Sister" for the endowment of a cot. The Hospital has room for some more cots!

When we come to the details for the year's expenditure we find that there has been a distinct economy in the ordinary expenditure. In 1904 this was £61,717 16s. 3d.; last year it was £61,339 15s. 8d., a decided saving, taking into consideration the fact that the number of our patients has increased, and that 1904 was in many respects a more economical year than 1903. In the main, this saving has been due to the extreme care which of late has been exercised over tenders and contracts. When we take details it is refreshing to find that Guy's stands well to the good, so far as expenses are concerned, when compared with other London hospitals which have scarcely so huge a housekeeping as ours is. Our meat bill came to £1,750 3s. 2d., our milk cost us almost as much; groceries accounted for £680 12s. 6d., bread for £691 18s. 3d., and vegetables £284 17s. 5d., while for malt liquors we had only £8 odd to pay. Board for the Residents came to £1,384, the boarding bill for the Nursing Staff totalling £4,786. So much for provisions, the grand total for which comes to £12,937 8s. 1d. The Surgery and Dispensing total came to £7,077 1s. 6d., and the main items in that account we have already given in a former article. The only other item we need here refer to is instruments, the yearly bill for which amounted to £944 3s. 11d. (this included appliances). The domestic account, including such items as washing, chandlery, uniforms, bedding, crockery, etc., came to £11,192 6s. 9d. Establishment charges, which included rates and taxes, insurance, ordinary repairs, and "garden" (£115 14s. for this item), amounted to £9,570 odd. Salaries, wages and pensions came to £14,380 16s. 10d., while miscellaneous expenses, under which figures the item "burials, £27 5s.," totalled £995 15s. The expenses of administration and management came to £3,634 8s. 11d., a ridiculously low figure when one considers what the management and administration of a large hospital mean. Postage and telegrams—usually a considerable item in the details of expenses of management in any company—only amounted to £56 15s. 8d.; printing and stationery came to £131 odd, and we spent exactly £100 4s. 6d. on official advertisements.

It is interesting to compare this total ordinary expenditure with the number of patients. Taking the number of patients treated during the year, roughly, as 146,000 (as a matter of fact there were 146,148, including both In and Out-patients) we find that the average cost per patient was just over 8s. Coming to the cost per bed, the figures are of course much higher. "The practice at Guy's," remarks Mr. Bonsor in his report, "has been to base the cost of an occupied bed on total ordinary expenditure, as defined in the Uniform System of Accounts for Hospitals, certain deductions being made in respect to Out-patients. This course serves the comparative purposes of the particular Institution, but external comparisons must be unreliable as a test of economy. To demonstrate this is easy. Under the heading of Ordinary Expenditure are included such items as rent, repairs, washing, and interest on loans. Now some hospitals have to pay rent in varying amounts; others are their own landlords; some Institutions are practically relieved of rates; most are not. Guy's Hospital pays nearly £3,000 a year in local rates alone. Then, again, there is the difference in assessments to be taken into consideration, as also the age and condition of buildings in regard to repairs. A new Institution is not necessarily more deserving of support because its bill for repairs is less than that of an old Foundation, nor is one which has never needed to borrow invariably superior in management to a less fortunate Corporation." These are considerations to be borne in mind, else the average cost per bed per year may seem, to an outsider at least, too high. In 1904 it was £85 4s. 2d.; last year it amounted to £82 1s. 1d.

Turning to extraordinary expenditure, we find but three items on the list, and though their total is large, none of us will cavil at them. They are Building Improvements, £7,605 12s. 7d.; Repayment of Loan from Bank, £38,000; and Repayment in part of Loan from Re-Endowment Fund, £10,000; making a total of £55,605 12s. 7d.

We have been able to give but a bald summary of an extremely interesting and instructive part of Mr. Bonsor's report, but it is sufficient at least to make us better acquainted with the financial side of our Institution—the side of which the majority of us know the least. The year's work in this department has been wholly encouraging, and we can sincerely echo the expression of gratitude of the Governors to the friends, old and new, who during the past year "came to the aid of the Hospital and did so much to relieve its burdens and brighten its prospects."

Notice.

Classes for the Final Examinations in July, 1906.

The above Classes will shortly commence. There will be School Examinations in the different subjects as under, in the Committee Room, Medical Office:—Medicine, Tuesday, April 24th, at 10 a.m. Midwifery, Wednesday, April 25th, at 10 a.m. Surgery, Thursday, April 26th, at 10 a.m. Names should be left in the Medical Office not later than Monday, April 23rd.

April 11th, 1906.

Births.

BENTLEY.—On April 6th, at Haworth, Mitcham, the wife of Harold Bentley, M.R.C.S. Eng., L.R.C.P., of a son.

KNIGHTS-RAYSON.—On February 16th, at Steytlerville, Cape Colony, South Africa, the wife of H. Knights-Rayson, M.D., M.R.C.S., L.R.C.P., of a daughter.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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The Future.

IN the last three issues of the GAZETTE we have attempted to give a summary of the work which has been accomplished at this Hospital during the past year, and incomplete and fragmentary as these sketches have been, they serve at least to show that in no sense have we forgotten the fact that Guy's Hospital has a magnificent record of charitable service to uphold and to add to. There are times when it is no boastful presumption on our part to draw attention to our work. It is possible that to many, who are unacquainted with our needs, who do not realize that there is scope for an extension of our labours, and who are able, and perhaps not unwilling, to help in furthering the realization of the hopes that some of us cherish, a brief delineation of what yet remains to be done might not be without interest. And for that reason we desire, without further apology, to draw more particular attention to that part of our Treasurer's report which deals with the Future.

It is unnecessary to set forth at length the claims which this Hospital has for generous support from the public. For almost two hundred years it has served the needs of the most densely-populated part of South London: for almost an equal length of time has it served the Empire as well, as a training school for medical men and nurses. Steadily, as means permitted, it has been improved and extended, increasing its capabilities for usefulness, and bettering its means for dealing out that succour and help which the original founder had in mind when he began it. Yet all that has been done in spite of difficulties under which it laboured and against which it still struggles. Let us take one point —the want of a Children's Ward. In a general hospital, such as ours, the need for a juvenile ward is obvious. Its want at Guy's has been felt, more particularly of late when the increasing number of In- and Out-patients, and the lack of cot accommodation in the medical and surgical buildings have painfully demonstrated the imperative necessity for a separate ward where children could be treated. At present there are a few dozen of cots scattered about in the various wards, and these are in constant and continual occupation. We are not overstating the facts when we say that the absence of such a ward throws an added strain on the already overworked Out-patient department, and the long-suffering O.P.O. and A.H.S. in the Front, and that its want necessitates the turning away of juvenile patients whose claims to hospital harbourage and warding are often indisputable. It is a want of which the Governors have long been conscious, and which they have frequently considered the

advisability of remedying. Hitherto, unfortunately, lack of funds has prevented them from seriously contemplating any radical method of dealing with this important matter. There was a want of building accommodation, and there were other and more imperative necessities to look to, and up to the present, at least, the question of a Children's Ward has had to remain in abeyance. But now, when some of these needs are no longer so pressing, it is perhaps well that the matter should once more come under discussion. It is, however, manifestly impossible to think of starting such a building without the necessary means for completing it, and for endowing it when completed, and although the amount required for that purpose is not excessive, it is at present beyond the means of the Hospital finances, and seems likely to remain so unless sufficiently active and generous interest is displayed in the proposal by those who are able and willing to help in its materialization.

The second point to which we would direct attention is the needs of the Medical School. It has done, and still does, much for the Hospital, and yet it is absolutely independent of the Hospital funds, drawing no financial support from it, yet giving to its service every year a squad of workers whose services are entirely voluntary. We need not stop for the moment to consider the question of reciprocity. That there is, and must be of necessity, a certain amount of reciprocity is inevitable, but we maintain that the amount of profit that the Medical School derives from the Hospital is by no means proportional to the return it makes both to the Hospital and to the medical profession. It has had warm friends and generous supporters, but it needs more friends and further generosity. The specific endowments it requires are set forth in the Treasurer's report, and need not again be detailed here. They are, briefly stated, a sum of approximately £117,000 for endowments for research work, and for endowments of chairs and lectureships in special faculties. It is not a huge sum to ask for. Considering the standing of the Medical School and the work it has done in the past with the slight means at its disposal, it is a comparatively small sum, but it is urgently required, and until at least a proportion of it is in hand, little can be done towards that advance and improvement which are so imperatively necessary.

These are but two points. There are others which we need merely mention. Such, for instance, as the Appeal for securing a fixed increase in annual income of £15,000, which will make the Hospital independent of the shortcomings in its revenues from trust funds, and the Fund for Re-Endowment, not to mention the Million Shilling Fund, which is urgently in need of revitalization. But these are matters which, in a sense, can look after themselves, The Children's Ward and the Medical School requirements are matters which will appeal to every Guy's man the world over. There has been talk at various times of perpetuating the connection of John Keats with this Hospital in some way or other. What better monument to, or perpetuation of, his memory can be found than a Children's Ward, dedicated to him, and standing in the place where he worked when he was an unknown dresser at Guy's? It may not exactly be—

> A chamber, myrtle walled, embowered high,
> Full of light, incense, tender minstrelsy,
> And more of beautiful and strange beside:

but it will certainly prove a blessing to the infantile population in the vast district his Hospital served, and a boon to that Hospital itself.

Clubs' Union Appeal.

(Received up to Thursday, May 3rd, 1906.)

	£	s.	d.
Amount previously acknowledged ...	204	12	0
J. Fawcett, Esq., M.D., F.R.C.P.	3	3	0
	£207	15	0

Notices.

The Revision Classes in Surgery for the July Exam. will be held on Mondays and Fridays at 12 noon, and on Tuesdays, at 4.30 p.m., in Class-room No. 3, Medical Office, commencing on Tuesday, May 22nd.

Special Classes for the Diploma in the Public Health Exam. will be held as follows:—*Lectures on Hygiene.*—Dr. Sykes, Fridays, at 5 p.m. *Chemistry and Physics.*—Mr. Ball, B.A., Wednesdays, from 2 to 5 p.m. *Bacteriology and Parasitology.*—Tuesdays and Fridays, from 2 to 5 p.m. The first class will be held on Tuesday, May 8th. Fee for the course, 20 guineas.

Passim.

AT the General Court of Governors which was held yesterday, the recent appointments to the Consulting Staff were officially ratified. Mr. Lucas becomes Consulting Surgeon, and Messrs. Brailey and Higgens are appointed Consulting Ophthalmic Surgeons to the Hospital. Although we have already expressed our appreciation of the services which these gentlemen have rendered to the Hospital and Medical School, this official notification of their transference to the Consulting Staff enables us once more to thank them, and to wish them a long and happy connection with the institution with which they have been so long and so actively associated.

With the passing of Mr. Lucas into the ranks of the "Staff-in-the-Shadows," Mr. Dunn moves up one place and becomes Full Surgeon. As he has now been in charge of Mr. Lucas's beds for more than three weeks, our congratulations to him on his promotion may appear somewhat belated. They are none the less sincere, even though they are tempered by a keen appreciation of the loss which his departure from Out-patients entails. We shall miss his Wednesday afternoons at the back, but no doubt the manner and methods which he applied to such good purpose there will continue with him in the wards, and win for him as large and as appreciative a following when going round, as he had when cheerfully expatiating at Outers on the complications of varicose veins.

There are others to be congratulated on their respective advances up the ladder that leads to fame and reputation. Dr. French, who has been in charge of Dr. Bryant's beds during the latter's enforced holiday owing to ill-health, is appointed Assistant Physician, and remains in charge in Addison and Mary for the time being. Messrs. Eason and Ormond are appointed Ophthalmic Surgeons, Mr. Rowlands becomes Assistant Surgeon, and takes on Dr. Dunn's beds, moving with his chief into Naaman and Dorcas. Mr. Thompson, who has been translated to the Dissecting Room, is replaced by Mr. Hughes as Resident Surgical Officer, and Mr. Greaves comes on as Surgical Registrar, while last, and by no means least, Mr. Mann steps into the second Medical Registrarship. To each and all go our congratulations and good wishes for future success.

Another change to be chronicled is the retirement of the Rev. P. H. Bown, Assistant Chaplain to the Hospital, who has left Guy's to take charge of work in the Isle of Wight. During his stay at the Hospital Mr. Bown has made many friends, and won the respect and goodwill of all by his genial courtesy and kindly sympathy. We have almost come to look upon him as a fellow student and co-worker in the wards. His departure will be regretted by everyone, patient as well as hospital worker, and we wish him every success in his new sphere of work.

For the Passimist the fag-end of the vacation is a particularly hard period. There is next to nothing from which to draw paragraphs. Doubtless there are many who expect that we should refer, in terms more or less in consonance with their own opinions, to the recent unfortunate event which has afforded some of our dailies scope for a magnificent headline. We have, however, resolutely put aside the temptation to do so. Later on, when the matter can be calmly and dispassionately reviewed, we may return to it. For the present we prefer to deal with other subjects, and there are some matters which may well claim a certain amount of space in this column. One, indeed, there is of such importance, that it is surprising that Passimists of the past have not vigorously and earnestly drawn attention to it. It is the unfortunate case of the Extern. Under the new scheme we understand that Maternity Out-Patients will be provided with two cards, an extern card and a nursing card, the latter giving them the services of an experienced nurse to look after the baby. Some people like washing babies, but it is a job on which the average Extern—who, it is true, is rarely called upon to supervise it—does not look with feelings of pleasurable anticipation. The new system will provide a nurse for such hygienic operations, and it will be interesting to see how far it will help the work of the five men on monthly maternity duty.

There are, however, other aspects of the Extern question, and the chief point concerns the College authorities far more than it does the Hospital. Under the conditions that obtain at present, the appointment is perhaps the most expensive that a student can hold. For a full month he has to occupy a closet which is more uninviting, more cramped, and far less well lit than the average garret which he visits on his rounds. For the privilege of sleeping in this miserable apology for a bedroom he has to pay half-a-guinea a month, a fee which, we suppose,

charitably covers candles as well, for two at least of the rooms have no gas laid on. It is not exaggerating or over-stating the facts when we say that the sleeping accommodation which is provided for the hardest-worked students at this Hospital is a disgrace to the College. We do not complain of the furniture—or rather, the absence of it. After all, there are other measures of usefulness for a wash-hand basin than the number of cracks in, and the number of chips out of it; for a window than the number of broken panes it contains. But air and light are at least desirable, if not absolutely necessary. Two of these rooms are the barest and smallest in the building, and no student in his senses would dream of occupying either if he had any choice in the matter. But he has no option. He has to live in the College and make the best of things as he finds them.

IT is a matter that seriously demands the attention of the College authorities. We believe that the Medical School exercises an almost parental supervision over the quarters of those students who are fortunate enough to lodge in rooms recommended by the School. Is it too much to expect that the College authorities will be equally keen on seeing that the Externs are decently housed? It is an appointment which entails hard work, and some of that "two-o'clock-in-the-morning courage" that Napoleon appraised so highly. And yet, as matters are at present, the Extern is infinitely worse off than the average student who lodges and boards in the College. No good purpose can be served by drawing further attention to the deterioration in the catering; if the authorities do not by this time understand that grievance, it is useless to expect that there will be any change so far as the food supplied to the Externs is concerned. But the accommodation is a matter to which, so far as we are aware, no direct attention has yet been drawn, and in view of the fact that the majority of rooms provided for students at the College are at least clean and fairly comfortable (and also, in a measure, cheaper), it is grossly unfair that the Extern should continue to be shoved into the disreputable apartment he at present has to tenant.

DR. A. M. DALDY, an old Guy's man, was entertained to a complimentary dinner on Wednesday evening, the 17th ult., at Kingston, on the occasion of his leaving that town for Brighton, and a large number of his fellow-practitioners (which included some Guy's men) and lay friends united to honour him. Replying to the toast of the evening, Dr. Daldy recalled "the farewell occasion, twelve and a half years ago, when he left Guy's Hospital," and referred feelingly to the break of his connection with the work at the hospital. At the conclusion of the dinner, Dr. Daldy was presented with a handsome collection of literary works. We are indebted to the *Surrey Comet* for the account of the gathering.

THE annual general meeting of the Athletic Club was held on Thursday afternoon, and there was a large attendance to welcome Mr. Lucas, who came to take the chair, on his first appearance at a hospital function since his retirement. It is a pleasure to find that his retirement will not mean a severance of his connection with the Club, and that he has consented to act as president for another year. We understand that the Hospital Sports Meeting is fixed for the first week in June, and that the Inter-Hospital Sports will take place very soon afterwards. Under the circumstances, we gladly comply with the Secretaries' desire to impress on competitors the necessity for preliminary training.

LAST Tuesday's concert by the United Glee Club and Choral Society, or, to give the combination its official title, by the Guy's Hospital Musical Society, was in every way a distinct success. The excellence of the entertainment provided reflected the greatest credit on all concerned, and it is to be hoped that the Society will be able to hold at least one other concert this session. Their latest venture has amply proved that they have the necessary talent and skill, and we look forward to their next concert in anticipation of an equally excellent entertainment.

THE Million Shilling Fund has had to acknowledge several generous gifts during the past week. The Committee of the Marlborough Subscription Dances has forwarded twenty guineas to the fund, being the profits on the dances during the past season. The Guy's Hospital Musical Society sent £12, the proceeds of Tuesday night's concert. Our best thanks are due to all who have so kindly helped and are still helping the Fund.

Chronic Constipation.

CLINICAL LECTURE BY Mr. LANE,
February, 1906.

(Continued from the last issue.)

The toxic causation of changes described.—The absorption of toxic material produces a degenerative change in all the structures of the body. The heart and vessels show marked evidences of decay. The hands and feet are cold, clammy, patchy and bluish. The voluntary muscles become pale, wasted, and abnormally friable, and fat disappears from the tissues. I have already described the changes which are produced by the toxins in the skin.

The clinical symptoms vary also as they are brought about by the over-loading of the intestines and the consequences which ensue on it, or by the absorption of toxic material from some portion of the gastro-intestinal tract.

The material harm done directly or indirectly by imperfect intestinal drainage is infinitely greater and more far-reaching than that ascribed to alcohol, while the misery inflicted on the individual, as well as on those brought into constant association, is often very intense. The depression of mind and body produced by it not infrequently drives the sufferer to find refuge from the one or a stimulus to the other in alcohol.

While in the large proportion of cases of sluggishly acting gastro-intestinal tracts constipation in varying degrees of severity is commonly present, in a certain number the patient obtains a daily evacuation, a surplus being discharged daily from an over-loaded cesspool. In a smaller proportion of cases diarrhœa may exist, the patient having several fluid and often offensive evacuations, one often following immediately on a meal, or there may be alternating periods of constipation and diarrhœa. The diarrhœa may be of a very irritating character, and much mucus, or even mucous casts, may be present in the motion. Indeed, some acute infection of the colon is not a rare complication.

We will now consider the clinical symptoms which are associated with the altered mechanical conditions of the intestines.

In the first instance, I think we may assume that what is commonly called indigestion is the earliest factor in the determination of the delayed functioning of the gastro-intestinal tract consequent on the altered condition of the intestines, which results from improper feeding. This, by diminishing the general energy and the respiratory capacity, assists in reducing progressively the ability of the several portions of the body to perform their normal functions, and impairs still further the manner in which the drainage apparatus performs its work. Indeed, indigestion in one form or another may be regarded as a usual concomitant of delayed and obstructed drainage. The frequent distension of the appendix, cæcum, ascending colon, transverse colon, and subsequently of the small intestine and stomach, produces feelings of illness, physical and mental inactivity, nausea, vomiting, flatulence, or pain, which are in part due to the more local distension determining a reflex upset of the whole tract, and partly to the toxic influence exerted by the ptomaines absorbed by the mucous membrane.

The patient experiences considerable discomfort, tenderness, or pain over the cæcum and ascending colon. This may extend downwards and inwards over the middle line into the true pelvis. Associated with this pain there are pain and tenderness below the last rib on the right side, and often along the distribution of the ilio-inguinal and ilio-hypogastric nerves. The pain in the loin, and that reflected along the nerves, are increased by exercise. They simulate very closely the pain of stone in the kidney, and have frequently led surgeons to explore the right kidney. Finding nothing in the condition of the kidney to account for the pain, the surgeon has been disappointed, but more often than not the patient has been relieved for a time. The surgeon has easily explained this post-operative amelioration of symptoms on the ground that an operation on the abdomen, though apparently unsuccessful, may do good by impressing the patient morally. In this case, as in most others, there is no necessity to draw on one's imagination, since the procedure necessary to explore the kidney thoroughly liberates the attachment of adhesions and bands pulling on the hepatic flexure, and frees the bowel for a longer or shorter period from the obstruction, the real cause of the symptoms.

The pain immediately below the last rib is due partly to the drag exerted upon this area by the adhesions when the patient is in the erect posture, and when in the supine posture from the backward thrust of the upper extremity of the distended bowel. The same traction exerted upon the last dorsal, ilio-inguinal and ilio-hypogastric nerves accounts for the reflex pain described, which simulates renal irritation.

A little consideration of the mechanics of the big bowel shows that while the cæcum and ascending colon have great difficulty in passing on their contents in the erect posture, their evacuation is very much facilitated by the assumption of the supine position, and this may be increased still further if the pelvis is raised by elevating the foot of the bed. The increased facility of evacuation of the fæces from the cesspool in the supine posture probably accounts for the morning evacuation of civilised life.

When the lower part of the distended cæcum occupies the true pelvis, a dull pain is experienced over the sacrum about the right sacro-iliac joint. This pain is much exaggerated during defæcation, when the patient has a sensation of an obstacle in the bowel which he cannot overcome. Straining drives the large, engorged or inflamed cæcum further downwards into the pouch of Douglas, and makes matters worse. The patient may be unable to lie on the left side owing to the drag exerted by the loaded cæcum.

The transverse colon sometimes produces considerable discomfort or pain. Its position can readily be defined by the hand as it descends to the brim of the true pelvis. When the splenic flexure is obstructed the patient complains of a griping pain along the course of the ascending portion of the distended and elongated transverse colon, and of a dull aching pain in the left loin about the last two or three ribs. This last pain is produced in the erect trunk by the drag and in the supine posture by the thrust of the loaded bowel.

The fixed and shortened sigmoid is often very tender on pressure, and can be readily felt in its abnormal situation. Severe pain may be complained of during the passage of fæces through it. The abdomen is fuller than it ought to be, and a little careful manipulation shows the presence of a quantity of fluid in the small intestine, and particularly in the ileum, where material accumulates because of the difficulty of its entry into the cæcum.

The diminution in respiratory capacity which is brought about in consequence of indigestion in young people is a matter of vital importance, and is a very material factor in lowering the activity of all the vital processes in the body. In the first instance, deficient oxygenation results from serious alterations in the abdominal mechanics. Later a vicious circle is formed, the defective æration impairing the digestive processes.

Very soon after birth, in the state of civilization familiar to us in this country, the imperfect nature of the food supplied, which is not often maternal in origin, produces disturbances of the gastro-intestinal tract and consequent imperfect nutrition. Now, in infancy, indigestion is a very much more serious condition than it is in adult life; indeed, one may safely generalise by saying that the harm done by disturbance of the gastro-intestinal tract varies inversely with the age of the child. In young life, the supply of nutritive material derived from the intestines has not only to meet ordinary wear and tear, but an excess has to be obtained from which to form new tissues, and the growth of the child depends largely on the amount of this balance. As the process of digestion is vastly more active in infancy, the facility with which it is interfered with is correspondingly great, and the consequence of such upset is far-reaching and disastrous.

The result of indigestion in the infant is to produce an inflammation and distension of the intestines and irritation and enlargement of the lymphatic glands draining the tract through which material passes, probably in an abnormal state, setting up troubles and disturbance in transit. Associated with these conditions and in consequence of them, a varying quantity of serous fluid is thrown out by the irritated peritoneum. This general depreciation of vitality and the formation by the inflamed glands and the peritoneal effusion of suitable culture media render the abdomen of young infants a very common seat of tubercle.

An examination of the left ovary may show that it is fixed and in many cases that it is abnormally large or definitely cystic. It is often very sensitive to pressure.

The mental depression and depreciation associated with this form of poisoning are remarkable, the patients being unable to concentrate their attention on anything; they are sometimes so drowsy as to appear to be under the influence of a narcotic. The toxic symptoms increase during the day. These patients are liable to attacks of faintness or giddiness, due to the presence of a large quantity of toxic materials in the circulation, or to pressure on the heart by distended stomach or bowel, or to both. Loss of control over the temper is also a very marked feature. Their resisting power to the entry of organisms is very materially reduced.

The progressive loss of fat and the increasing staining of the skin are perhaps the most marked and serious features of this form of poisoning. These two conditions especially combine to produce that appearance of premature age so characteristic of faulty drainage.

Their onset affords definite evidence that the body has become unable to resist the influence exerted by the poison upon it, and unless this deleterious influence be met effectually, degenerative processes progress at a rapidly increasing rate.

I have already demonstrated the mechanical relationship of so-called "appendicitis" to overloading of the cesspool or cæcum, and as its symptoms are more or less generally known, I will not allude further to them here. I say more or less generally known, as there is a remarkable tendency to ascribe to the appendix any tenderness present in or about a line which extends from the anterior superior spine of the right ilium to the umbilicus. Those making this mistake have, however, the satisfaction of knowing that if the appendix is not the cause of the trouble its excision involves practically no risk. It can be removed through a very small hole, the comparative minuteness of which, and the very brief convalescence which ensues, gratify the operator and the patient, and suggest great skill. The operation frees the patient from a possible danger, and the surgeon explains the freedom from inflammation of the appendix on the supposition that between attacks it may be quite normal. While the patient remains on his back during convalescence, the absence of symptoms also suggests success, this opinion being only modified by the subsequent course of events.

The presence of the distended and inflamed cæcum and appendix in the true pelvis probably interferes with the efficient performance of the functions of the ovaries and Fallopian tubes, and in some cases matting of the tubes or ovaries results in consequence. The presence of toxic material in large quantity in the blood causes a loss of pelvic fat and a want of tone in the muscle of the uterus, etc., and interferes with the perfect functioning of the organ and its appendages.

I have only referred indirectly to the attacks of acute obstruction of varying degrees of completeness and severity which may arise from interference with the passage of fæcal material from the cæcum into the ascending colon, from the ascending colon into the transverse colon, and from the transverse colon into the descending colon.

A knowledge of the mechanics of the changes which ensue in the large intestine will readily enable the surgeon to diagnose these conditions, and to differentiate them from trouble in the stomach, kidney, gall bladder, appendix, uterus, or rectum, to all of which structures I have frequently known these conditions attributed.

In the treatment of such degrees of overloading of the large bowel as cannot be treated efficiently by measures short of operation, I have obtained considerable success by dividing constricting bands and adhesions, and by subsequent careful attention to the proper functioning of the bowel. In a considerable proportion of cases, and more particularly in women, such means are insufficient, as at the best they only afford temporary relief, since the condition of obstruction recurs sooner or later.

Therefore, when I recognise that the mechanics of the intestines have been altered to a degree that cannot be rectified satisfactorily by the division of bands, etc., I divide the ileum at a distance of about five or six inches from the cæcum. This can be done rapidly and securely by applying two compression forceps on the ileum at an interval of about an inch, so as to reduce the bulk of the coats to the minimum possible.

As the proximal forceps is removed, the compressed band of bowel is laced with a sufficiently stout ligature, which, after being tightly knotted, is made to encircle the constriction. The ileum is divided immediately beyond the ligature. The stump is wiped clean with a swab, and is then buried in the proximal bowel by means of a purse-string suture which encircles the bowel about three-quarters of an inch above its ligatured extremity, rendering the closure absolutely secure (Figs. 7 and 8). The

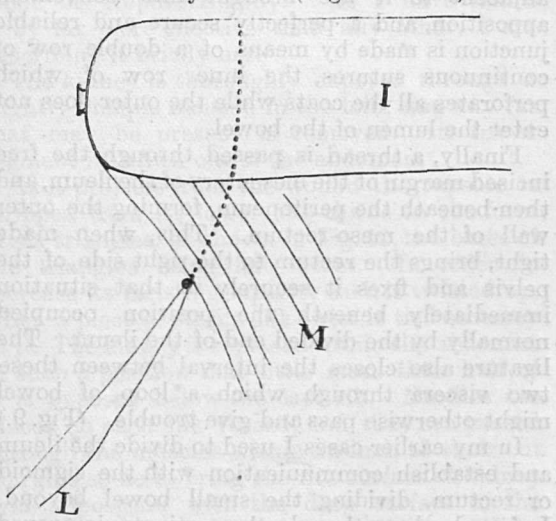

FIG. 7 shows the ileum, ligatured and divided; L represents the suture which is passed beneath the peritoneum of the mesentery (M) and of the bowel (I), which it encircles transversely.

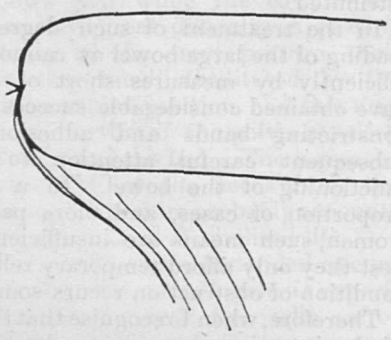

Fig. 8 shows the condition present when the ligatured stump of bowel has been invaginated by means of forceps within the limits of the encircling suture, which has then been drawn tight.

termination of the ileum with the cæcum, ascending and transverse colon are separated from their attachments. I am usually satisfied to divide the transverse colon at the splenic flexure, closing the distal portion in the manner already described. On several occasions I have removed the descending colon and the sigmoid, closing the large bowel at its junction with the rectum. I do not think that the presence of the sigmoid and descending colon prejudices materially the patient's recovery, and on this account I generally leave them, but if the more extensive operation can be performed without any added risk, I prefer to do it.

The termination of the ileum and the rectum adjacent to it are brought into convenient apposition, and a perfectly secure and reliable junction is made by means of a double row of continuous sutures, the inner row of which perforates all the coats while the outer does not enter the lumen of the bowel.

Finally, a thread is passed through the free incised margin of the mesentery of the ileum, and then beneath the peritoneum, forming the outer wall of the meso-rectum. This, when made tight, brings the rectum to the right side of the pelvis and fixes it securely in that situation immediately beneath the position occupied normally by the divided end of the ileum. The ligature also closes the interval between these two viscera through which a loop of bowel might otherwise pass and give trouble. (Fig. 9.)

In my earlier cases I used to divide the ileum and establish communication with the sigmoid or rectum, dividing the small bowel beyond. I found that though the patients improved considerably for a variable time, they usually complained greatly of the discomfort or even pain caused by accumulations of solid material

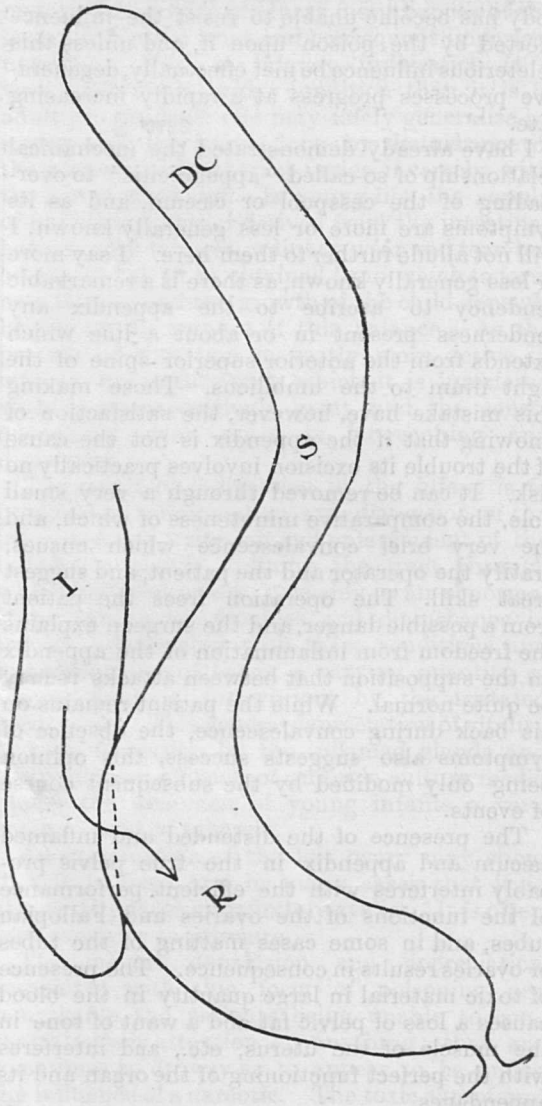

Fig. 9, represents the descending colon (DC) closed at its upper limit, with the sigmoid (S) and rectum (R). Also the termination of the ileum (I), and the aperture of comminution between the end of the small bowel and the rectum.

in the cæcum. This symptom was removed by the excision of the large bowel, which I adopted in almost all the cases in which I had previously short-circuited.

Should the blockage of the bowel be of sufficient severity and duration to have resulted in adhesions of the small intestine, it is well to examine it along its length and divide such adhesions and bands as effectively as possible.

In volvulus of the cæcum producing acute obstruction, if the condition of the patient permits of an operation somewhat longer than that of merely draining the distended bowel, the large gut is excised and the ileum is connected with the rectum, as already described.

In certain circumstances it is necessary to consider the advisability of establishing lateral anastomosis between anchored loops of the small bowel liable to obstruction, or if convenient to divide the ileum above the obstruction in it.

In volvulus of the sigmoid the treatment varies with the conditions present. In cases of moderate severity a good result can be secured by imitating the process which takes place usually in chronic constipation, namely, the shortening of the meso-sigmoid and the fixation of the sigmoid. This can be effected by a number of continuous silk sutures attaching the meso-sigmoid, and then the sigmoid to the peritoneum lining the wall. When the sigmoid is enormously dilated and actually inflamed, two modes of treatment suggest themselves. On two occasions, after draining and washing out the bowel, I have excised the entire loop and obtained a perfect junction. I employed a Murphy's button for this purpose, as, owing to the very considerable difference in the calibre of the two sections of the bowel, their fixation to the iliac fossa, and the condition of the patient, it was practically impossible to connect them in the usual way by sutures. As many of these cases occur in circumstances in which sufficient assistance is not available, a more simple procedure is to drain and to irrigate the loop, and to establish a large lateral anastomosis of the loop itself near its base, dividing and closing each limb of the loop beyond the junction. I have also cut through the limbs of the loop just beyond the margin of the abdominal wound, and have established an end-to-end anastomosis.

Except in patients who are supremely toxic and feeble, the operation for meeting defective intestinal drainage is accompanied with little risk. If, however, the obstruction be acute and the intestines and abdomen be distended, the risks are rather those of the condition calling for interference than of the operation itself. Except in advanced cases, in which the small intestines have become adherent to one another, and consequently liable to obstruction, this operation affords the patient more or less complete freedom from all the symptoms which existed previously, the amount of relief varying inversely with the changes in the small bowel.

The behaviour of patients after the operation is very variable. While one patient will not be sick after the removal of the bowel, another will continue to vomit for perhaps even ten days. Such prolonged vomiting caused me much unnecessary anxiety at first.

I would urge operating at a sufficiently early date. If you delay interference till the small intestines have been habitually distended with fæcal contents, and their walls have become thinned and their muscle wasted and inefficient, till the stomach has also become affected, and the gastro-intestinal tract has got into the habit of performing its functions in a dilatory and inefficient manner, you will obtain only a partial amount of benefit from the operation. It would seem that once the involuntary muscle-fibre of the intestine has become overstrained by the pressure exerted upon it over a long period of time by the intestinal contents, its recovery is very slow and imperfect.

It is sometimes necessary to establish communication between the dilated stomach and the jejunum. When the weight of the transverse colon has been removed during the period of recumbency following on the operation, the dilatation of the stomach usually disappears more or less completely. Occasionally, one or both kidneys may have become so mobile as to necessitate their fixation. The operation which I have performed with uninterrupted success for this purpose is one I devised and described in the Transactions of the Clinical Society, 1892, in "A case of floating kidney treated by a new mode of Nephrorrhaphy." As I have found it by far more effective than any other, I am describing it briefly here:—

The kidney is thoroughly exposed through a slightly oblique incision in the loin, and any fat that may be present is removed. Its lower segment is drawn out of the abdomen.

As it projects from the wound the capsule is stripped from its lower two-thirds in the form of six triangles, as shown in Fig. 10, the bases of the triangles being left intact. In order to increase its resisting capacity each is twisted up, when a piece of sterile silk twist is tied securely to it. The kidney is replaced within the abdomen in such a position that little more than half of it is exposed below the last rib. Needles are placed on each silk thread, and they are passed through the muscles within an inch of their cut margins so as to bring the raw surface of kidney into apposition with the deep surface of the muscle wall freed from fat and fascia. When these sutures have been secured, the resistance offered by the capsule is so considerable that it

would require the expenditure of a great amount of force to displace the kidney from the position in which it is fixed. The incisions in the muscle wall and skin are then brought accurately together. I have performed this operation a very large number of times, and I have never known the kidney to move from its attachment to the wall. On two occasions I have subsequently had to expose such a kidney once to remove a stone, and the kidney substance and muscle wall were observed to be most intimately united. (Fig. 10.)

course of events have been excised. I am strongly of opinion that the operation of excision of the kidney has been undertaken much too frequently and often unnecessarily. I do not think that we should resort to such a serious measure until we have tried every other means possible to save the organ, following the same general principles that guide us in operations on the limbs (Fig. 11).

The procedure I adopt consists in exposing the hydronephrotic kidney with its pelvis and a considerable length of the ureter by a long

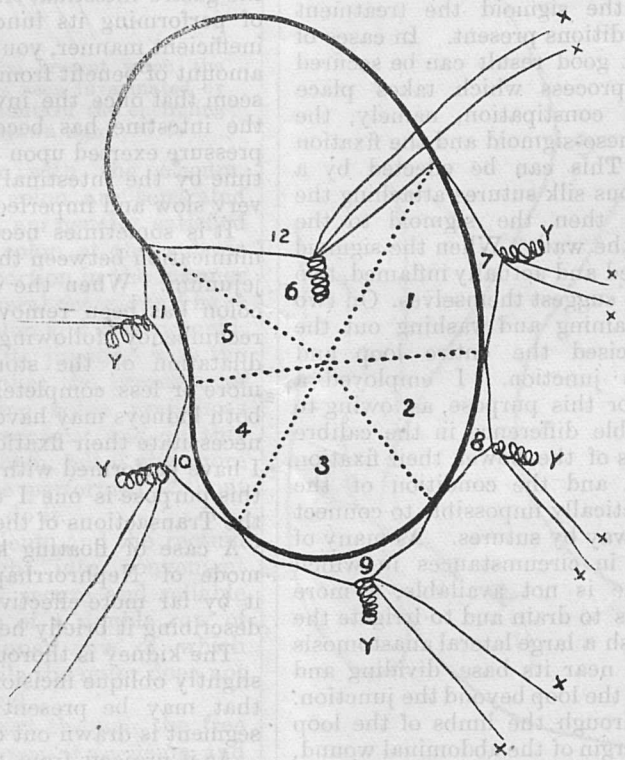

Fig. 10 represents the posterior surface of the kidney, the dotted lines showing the triangular areas (1, 2, 3, 4, 5, and 6) from which the segments of the capsule have been stripped (8, 9, 10, 11, and 12). These are shown with their bases continuous with the kidney and twisted, Y representing the twisted portions, a silk suture, ×, being attached to each.

I have for some time reduced the number of triangles formed by the capsule of the kidney from six to four, as by this means the operation is rendered less complex with no loss of security.

When I have found any considerable hydronephrosis resulting from excessive mobility or from other cause, I have employed a method which has been more successful than I ever ventured to expect. It has enabled me to save a number of kidneys which would in the ordinary

oblique lumbar incision, defining its mode of entry into the dilated pelvis. If any vessel is present in this situation over which the ureter is hitched it is ligatured and divided, but such a cause of obstruction is in my experience very rare.

An incision is made along the outer margin of the kidney into the dilated pelvis, and if possible a fine gum-elastic catheter is introduced through it into the ureter, along which it is passed beyond the brim of the true pelvis. In many cases I

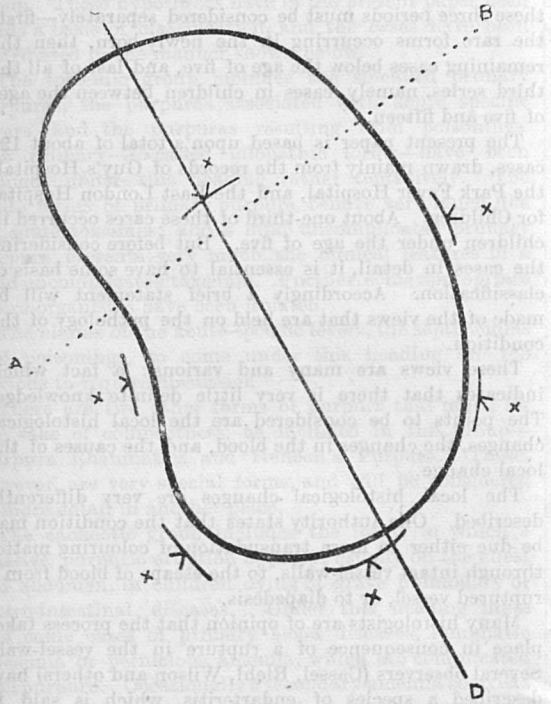

Fig. 11 represents the conditions present after the incision through the muscular wall has been closed. The incision is indicated by the firm line (C D) crossing the kidney from above, downwards and outwards. The dotted line (A B) shows the margin of the thorax. The several sutures (×) connecting the capsular segments to the muscle wall are seen emerging from it and tied securely.

have found it impossible to introduce the catheter into the ureter in this way, so I have opened the ureter by a vertical incision and passed the catheter through it into the pelvis of the kidney and out through the incision in this organ. The end of the catheter being in the ureter it is forced down beyond the incision in its wall for a considerable distance, when the incision in the ureter is accurately closed by means of a fine silk suture. The incision in the kidney is sutured, a piece of drainage-tube being left in the pelvis, and this with the catheter projects through the skin incision. The catheter is left in the ureter for six weeks or two months or longer, during which time urotropin and sandal-wood oil are freely administered. By the use of these drugs the urine remains normal, and the catheter does not become encrusted with any deposits of salts on its surface, but is perfectly sweet and clean when removed at the end of this time.

The drainage-tube is also taken away within a few days and the wound closed.

Dental News.

Bridgework.

Notes of a Clinical Lecture on Bridgework, by Mr. Percival S. Campkin, March 4th, 1906.

(Continued from the last issue.)

I.—All-Gold Bridges.

Example: $\frac{7}{}$ | —$\frac{5}{}$ | root.

The two abutments are coned so that each root presents a slight taper from the neck. Coin gold bands, soldered with the highest grade (00) solder, are accurately fitted —allowing about $\frac{1}{8}$ of an inch interval between occluding teeth, when the mouth is closed. A plaster impression is taken with bands in position, also an impression of the surfaces of the lower teeth, and an accurate bite. From these impressions a bite model is made on an articulator.

The bands and intervening space are filled with wax or composition, and the lower teeth having been previously covered with a layer of thin lead foil, exactly burnished to fit into every depression, are pressed quite "home" to the bite into the material. This material is now carved to represent the surfaces of the teeth to be replaced, taking into consideration the articulation. Make allowance for the thickness of gold at junction with bands, so that when the masticating bar is struck up, it will fit edge to edge with the bands. The lead foil on the lower teeth not only prevents any rubbing of their surfaces, but in this position is sufficient to allow for the thickness of the gold (No. 4, 22ct.). Between the two abutment pieces the gold is left a little full at the edges, so that it may be turned over.

This gold bar is now attached to the two bands by 00 solder, and the under-surface filled in with composition to prevent any bending, and the bridge tried in the mouth at this stage. Should any slight inequality of the articulation present itself, it can easily be remedied by burnishing or contouring. When satisfactory as to occlusion, it is advisable to take an impression of the surface with plaster. The inside of the caps should now be thickened. To ensure an even thickness, it is a good plan to strike up discs in plate gold, No. 4—6, according to space and fit, so that they just drop in the cap, and flow No. 1 solder under them. The space between abutments can be thickened by this method, or by odd pieces of plate gold and solder.

Composition is now modelled on under-surface of bridge, so that a smooth, slightly oval surface is obtained. A pattern of this is taken in tinfoil, a strip of coin gold cut from this pattern and fitted, so that it may be burnished to shape to meet the overturned edge, and exactly fit around sides of the bands and attached with No. 1 solder. The bridge is then filed, polished and gilded.

The Prognostic Significance of Purpura in Children.

Paper read before the Physical Society by G. H. K. Macalister.

Mr. President and Gentlemen,—

"Once upon a time, a traveller asked of a peasant the way to the friendly town. The peasant, who was not of his friends, set him upon the right path and told him to seek this and that landmark. But there were many such landmarks in the valley, and the traveller strayed."—(Abdurrahman Sâ-fi, Book I.)

Symptoms may mislead the physician even as landmarks misled the traveller. A sign-post on the road to death may differ but little from one that points to recovery. In the present paper an attempt will be made to estimate the prognostic value, in varying surroundings, of the phenomenon known as purpura.

Purpura may be defined as an eruption due to spontaneous extravasations of blood into and underneath the skin. It is often accompanied by bleeding from mucous membranes.

Such a group of symptoms occurs in a great variety of conditions. At times, accompanied by considerable constitutional disturbance, it forms only a minor part of the ailment. At times it dominates and gives a name to the disease. Further, while in some illnesses purpura appears in the moribund, there are others, much less common, in which it indicates the beginning of convalescence.

Purpura is a common symptom in many of the more important ailments of childhood. Thirty per cent. of all cases of purpura occur below the age of fifteen. In this paper, purpura will be considered only as it occurs in children, and an attempt will be made to differentiate forms in which it has any bearing upon the immediate or upon the ultimate prognosis.

In treating a subject like this, it is possible to follow one of two courses. The first is to select some half-dozen cases, and thoroughly to lay their past, present and future, to dissect these cases and resect them, pursue them to the uttermost parts of the earth with reply post-cards, and generalise freely from such meagre data. The second course, which has actually been followed, is to collect a fairly large number of cases from all the sources available, so as to have representatives of all the more important types in the correct proportions. The cases so collected are then sorted in some manner of grouping, so that it is possible to consider the various types in detail.

The consideration of the various cases here collected brings out at least one point, namely, that different ages often have their own peculiar types. The purpuras o the newly-born differ from those of infancy; the purpuras of infancy have little in common with those of later childhood. Therefore, cases peculiar to each of these three periods must be considered separately—first, the rare forms occurring in the newly-born, then the remaining cases below the age of five, and last of all the third series, namely, cases in children between the ages of five and fifteen.

The present paper is based upon a total of about 120 cases, drawn mainly from the records of Guy's Hospital, the Park Fever Hospital, and the East London Hospital for Children. About one-third of these cases occurred in children under the age of five. But before considering the cases in detail, it is essential to have some basis of classification. Accordingly a brief statement will be made of the views that are held on the pathology of the condition.

These views are many and various: a fact which indicates that there is very little definite knowledge. The points to be considered are the local histological changes, the changes in the blood, and the causes of the local change.

The local histological changes are very differently described. One authority states that the condition may be due either to mere transudation of colouring matter through intact vessel-walls, to the escape of blood from a ruptured vessel, or to diapedesis.

Many histologists are of opinion that the process takes place in consequence of a rupture in the vessel-wall. Several observers (Cassel, Riehl, Wilson and others) have described a species of endarteritis, which is said to precede this change. In a few cases lardaceous degeneration has been found.

The most valuable work on the subject is due to Unna. His conclusion is that the immediate cause of the appearance of a purpuric spot is the rupture of a small venule, consequent upon disease of its wall. Further, he states that this always occurs at the point of junction of the cutis vera with the subcutaneous tissues.

The next point requiring brief consideration is the condition of the blood in purpura. A large number of authorities consider that the fault lies not in the vessel-wall, but in the vessel-contents. Osler makes no mention of any local histological change, but states that, in cases of purpura, the coagulation-time of the blood is two or three times as long as the normal period.

There are good grounds for believing that in most cases of purpura there is a change in the composition of the blood. It is quite easy to conceive that some poison circulating in the blood might cause localised degeneration. It is quite easy to conceive that some general wasting disease would cause impoverishment of the blood, with degeneration of the tissues of the vessel-wall locally. A little thought, too, might suggest a third possibility—that minute fragments of solid material, having gained access to the circulation, might become arrested at some point, interfere with the flow of blood, and deprive a small area of its nourishment.

The first group, in which there is a poison present, might be named toxæmic; the second, or wasting group, cachectic; and the third might be called the embolic

group. These hypotheses have in the present paper been made a basis of classification, and the cases have been distributed in the manner shown below.

The toxæmic group includes the so-called primary purpuras, the purpuras associated with acute specific fevers, and the purpuras resulting from poisonings. The primary—so-called idiopathic forms—have been brought under this heading rather tentatively. The acute forms of primary purpura behave very much like an acute toxæmia; and a mild uncomplicated primary purpura presents very much the clinical features of a mild uncomplicated toxæmia. Further, some appropriate micro-organisms have been isolated.

The claims of the acute specific fevers, the septicæmias and poisonings, to come under this heading are too obvious to require discussion.

There are two other forms of purpura that must, for the sake of compactness, be included in this group—Purpura Rheumatica and Henoch's Purpura. These, however, are very special forms, and will be considered in more detail in another place.

The cachectic group includes the forms in which a massive purpuric eruption appears, usually on the chest and abdomen, in children dying of grave pulmonary or gastro-intestinal diseases. Under this heading must also come cases of primary blood diseases, lymphatic leucæmia or pernicious anæmia, which are complicated with purpura. Occasionally a secondary anæmia co-exists with severe purpura in which there have been copious hæmorrhages from mucous membranes. This is no more than the natural result of hæmorrhage.

The third group includes cases in which it is thought that small particles are circulating in the blood. It is represented in this paper by cases of generalised tubercle, generalised sarcomatosis and infective endocarditis.

Micro-organisms have been cultivated from the blood in a good many cases; streptococci, staphylococci, micrococci have often been obtained. The Germans have done much work on this subject. Flugge has isolated the Bacillus Hæmorrhagus, Bacillus Hæmorrhagus Septicus, and the Bacillus Hæmorrhagus Venenosus.

The various types of purpura represented in the present collection of cases will now be considered *seriatim*. Of these, the first cases are those of the newly-born.

A boy, four days old, was admitted under the care of Dr. Pitt, in 1905, for dysphagia and the passage of blood per rectum. There was a doubtful history of syphilis. The dysphagia started two days after birth. On admission he was deeply jaundiced and covered with an intense purpuric rash. Nystagmus was noticed on admission. He passed large quantities of blood per rectum, and died after two days in the hospital. A post-mortem examination showed that acute colitis was present, with congestion of the stomach and intestines.

A girl, three weeks old, was admitted under Dr. Taylor, in 1894. When she came in she was anæmic and of a yellowish colour, covered with hæmorrhagic spots. She was also losing a considerable amount of blood from the nose. Five days later she died. At the autopsy, large atelectatic patches were found in the lungs. Here, too, there was a doubtful syphilitic history.

Dr. Pitt's case is an example of one of those rather ill-defined diseases of the newly-born in which jaundice is associated with melæna and hæmorrhage. In some of these cases, where there is a definite syphilitic history, the name syphilis hæmorrhagica neonatorum is applied. Buhl's Disease is a very fatal variety of icterus neonatorum in which jaundice is associated with melæna and hæmatesis, œdema and wasting. The prognosis is absolutely bad.

The second case may have been another variety of this class, but was more likely hæmophilic. The prognosis in purpura neonatorum is undoubtedly unfavourable. In the special forms associated with jaundice it is absolutely bad. Townsend collected 709 cases of hæmorrhage occurring spontaneously in the newly-born from all causes, and found that the mortality was 79 per cent.

Next after the purpuras of the newly-born come the forms met with in infancy—that is to say, below the age of five. Commencing with the toxæmic group, the first cases are the primary purpuras, purpura simplex, and purpura hæmorrhagica. These names have been retained for convenience, although the distinction is really only one of degree. It is manifestly absurd to differentiate cases which bleed into the skin from cases which bleed from the mucous membranes. Well, of this class there are eight representatives. None of these cases occurred below the age of two. Three cases were fatal.

Some factors were common to the whole eight. The eruption was universal, and epistaxis was frequent. Vomiting occurred in most of the cases. The three that died possessed peculiar features which make them worthy of being quoted in detail.

Dr. Eustace Smith's case:—A girl, aged two, was admitted into the East London Hospital in 1897. She was previously in good health. The eruption started on the chest and shoulders, spread rapidly on to the neck and arms, and finally reached the abdomen. The first spots appeared two days before admission. On admission, the temperature was 104·2°. Her skin was of a straw-yellow colour, but the sclerotics had no icteric tint. On the third day in hospital, convulsive twitchings appeared in the limbs, and she died in delirium. At the post-mortem examination, the serous membranes were found to be studded with petechiæ, and large hæmorrhages were found in the heart muscle.

Dr. Donkin's case:—A boy, aged three and a half, was admitted into Shadwell Hospital in 1897. On the day before admission, a petechial eruption appeared on the chest and neck. It spread rapidly on to the arms, abdomen and legs. Four days later profuse hæmaturia started, and hæmatesis on the next day. After ten days his legs became œdematous. A blood-count, performed a few hours before death, showed that the red cells were

reduced to 720,000 per c.mm., and that the hæmoglobin was only 13 per cent. The illness lasted fifteen days.

In the next case the illness lasted for as many hours. A boy of three was admitted into Clinical Ward, under Sir Cooper Perry, in 1904. The illness commenced at four o'clock in the morning with epistaxis. A purpuric eruption soon started, and by six o'clock was universal. Large quantities of blood came from the stomach and rectum. The temperature was 99°. He died at six p.m. At the autopsy, the lungs were found to be studded with petechiæ, and the large intestine was full of blood.

This last case was diagnosed as purpura fulminans. The possibility of it being hæmorrhagic malignant scarlatina was also considered. However, as there was nothing really pointing to scarlet fever, the alternative diagnosis was dropped.

The text-books describe a type of scarlet fever in which there are associated hæmorrhages—a very fatal variety. On the other hand, Dr. Birdwood, of the Park Fever Hospital, states that the association of petechiæ with scarlet fever is, as a rule, merely accidental, and does not affect the prognosis. No cases of purpuric scarlet fever are described in this paper.

The other two cases of purpura seem to have all the features of a toxæmia. This is especially the case in Dr. Eustace Smith's patient, where the fever was so considerable. The interesting point in Dr. Donkin's patient was the extreme anæmia which existed before death, showing that in this case death was probably directly due to loss of blood.

Hæmorrhagic diphtheria is a rare but extremely fatal disease. During the year 1904, three cases of hæmorrhagic diphtheria were admitted into the Park Fever Hospital, out of a total of 594 cases of diphtheria of all kinds. In the present series there are fifteen examples of hæmorrhagic diphtheria without a single recovery. The illness usually runs an extremely rapid course.

On February 15th of this year a child of three years old was brought to the East London Hospital dead. The history was as follows:—The child first seemed to be "queer" on the 11th, and the throat symptoms started on the following day. On the 14th a universal purpuric eruption came out. On the next day the child was worse, and the mother brought it up to the hospital. On the way, however, it died in a fit. A post-mortem was performed, and most extensive membrane was found covering the soft palate, naso-pharynx, tonsils and larynx. Both tonsils were sloughing.

In other cases of hæmorrhagic diphtheria the local signs are not so prominent. It is said that in some cases the local signs may escape notice altogether, with the result that an erroneous diagnosis of purpura hæmorrhagica is made. This statement, however, must be very difficult to confirm. In the following case a mixed diagnosis was made.

A girl, aged five, was admitted into the Park Fever Hospital on June 22nd, 1901, suffering from diphtheria. There were slight hæmorrhages on the arms and legs. On June 24th right facial paralysis was present. On June 25th a bruise appeared over the sacrum. On June 30th the rash was more wide-spread. The girl got worse slowly. On July 11th the spleen was found to have enlarged, and fresh petechiæ were found on the abdomen. She died rather suddenly on the same afternoon.

The autopsy revealed a large hæmorrhage into the ventricles of the brain and into the brain-substance, disorganising the pons and the corpus striatum. There was no hæmorrhage into the spleen. Interstitial nephritis was present, and a diagnosis was made of post-scarlatinal diphtheria complicated with purpura hæmorrhagica.

No case of uncomplicated measles figures in this series. The only case of measles was suffering from diphtheria at the same time. The patient was a girl of 4½, under the care of Dr. Shaw, in 1902. Death occurred after five days' illness.

The diagnosis of hæmorrhagic diphtheria is sometimes difficult.

A girl aged two and a half was admitted into Isolation Ward, under Dr. Hale White, in 1901. The history was as follows:—On the 1st October she first became troubled with rhinitis and otorrhœa. On October 8th a hæmorrhage from the mouth occurred. Next day a rash appeared on the forehead and spread quickly downwards, covering the whole body. There was considerable œdema, and patches of erythema læve covered the œdematous parts. A diagnosis of hæmorrhagic diphtheria was made, and antitoxin accordingly injected. The temperature was 102°. On the next day the temperature was 103°, and a fresh crop of spots made their appearance. Dr. Hale White diagnosed sepsis with purpura. The patient was accordingly transferred to Miriam. The temperature rose to 104°, and the patient died on the same evening.

Two cultivations were made from the blood. From some blood taken from a vein during life, streptococcus albus was obtained; streptococcus longus from the heart after death.

The next group to be considered contains the purpuras due to poisoning; of these there are three cases.

A boy was admitted into Clinical Ward, in 1904, with a widespread purpuric rash. A few days before admission he sucked the ends off a boxful of matches. After death his liver was found to be fatty. An inquest was held, and a verdict of phosphorus poisoning was brought in.

Another case is recorded by Stephen Mackenzie. A child of two developed an intense purpuric rash, and died two days after a two-and-a-half grain dose of potassium iodide.

The third case was described by Dr. Dudgeon, in 1902. A boy, on his way back from a picnic, ate a pork-pie. Within a few hours diarrhœa and vomiting set in, an intense purpuric rash appeared, and the boy died twenty-four hours later.

The next group of cases is perhaps the most interesting of the series. The illness has all the characters of an acute specific fever, high temperature, diarrhœa and

vomiting, etc., and is accompanied by an intense purpuric eruption. Seven out of eleven cases occurred in infants under a year old. Every one was fatal. Four of the cases occurred at Shadwell, in 1901. The disease in each case ran a rapid course. The onset was usually sudden and marked, with vomiting. A universal petechial eruption came out. There was great prostration, and death usually took place within twenty-four hours of the onset.

From a variety of sources five other cases have been brought together. In these the characters are very much the same. There is the same acute onset, with convulsions, diarrhœa and vomiting, and fever. The temperature may reach 108°. Collapse and death are rarely staved off for more than thirty-six hours. All these five cases occurred in unvaccinated children.

This class has only one representative among the cases at Guy's Hospital. A boy aged four was under the care of Sir Cooper Perry, in 1904. The illness in this case was of an acutely febrile type, and hyperpyrexia occurred before the close. The history is as follows:—On June 9th the child had two fits, ushering in the illness. He grew steadily worse until June 14th. On that date spots appeared on the neck, which spread, during the next day or two, on to the chest and abdomen. On the morning of June 17th he was found to have developed broncho-pneumonia. Later in the day the temperature went up to 108°, and soon after he died.

A post-mortem examination was made, but beyond the condition of the suprarenals, nothing important was found. The left suprarenal was reduced to a hæmorrhagic mass; a few petechiæ were found in the right suprarenal.

On December 12th, 1902, a rickety girl of two years and eight months was admitted into the East London Hospital, under the care of Dr. Eustace Smith. The child had been vaccinated at the usual time. There was no evidence of congenital syphilis. The history stated that on December 3rd the child first complained of headache and weakness. On December 6th a swelling was noticed on the left side of the neck, behind the angle of the jaw. On admission, the child was apathetic, but screamed from time to time as if in pain. The veins of the scalp were distended. Temperature 101°. A suppurating cervical gland was incised, and thick greenish pus came out. On December 13th the child was extremely cyanosed and apparently comatose. Temperature 103°. A purpuric eruption appeared on the outer side of the left knee, and spread gradually over the rest of the limb, on to the right, and over the whole body. There were no convulsions. The child died on December 14th.

At the autopsy it was found that the left suprarenal was represented by a coffee-coloured hæmorrhagic mass. There were hæmorrhages in the cortex of the kidney. There was also an abscess in the thymus gland. Finally, extensive thrombosis was found in the superior longitudinal sinus and the superior and middle cerebral veins; this was accompanied by softening of the brain in the neighbourhood. There were pinpoint hæmorrhages in the cerebellum, but none elsewhere.

These two cases are not of the same type as the acutely febrile disease in young infants. The boy under Sir Cooper Perry seems to have them in some respects, but the illness was not quite so rapidly fatal.

What is the nature of this disease? The clinical features are those of a malignant form of an acute specific fever. A large proportion of the patients were unvaccinated. So some authorities say that this is a fulminating hæmorrhagic small-pox, and explain that the characteristic small-pox rash has not time to appear.

If this is a true explanation of these cases—and it seems a very plausible one—it runs counter to the commonly accepted view that small-pox does not occur in young children. The etiology, pathology and diagnosis of suprarenal hæmorrhage is an extremely difficult subject, and much work has still to be done on it.

This group finishes the toxæmic purpuras of infants, and enough has been said to show that it is a very fatal type of disease. The prognosis depends entirely upon the virulence of the toxæmia: in the mild toxæmia of purpura simplex the prospect is much more favourable. Cases in which the extent or the site of the bleeding terminates the illness are very rare.

The next group to be considered includes the cases described in this paper as cachectic. This is perhaps the best-known type of all the purpuras of infancy. It includes all those cases in which a massive purpuric eruption complicates severe gastro-enteritis, marasmus or broncho-pneumonia. The prognosis is grave, but not so grave as in the toxæmic class. Out of fifteen cases, ten died.

The eruption usually appears when the patient is already very ill. It may take the form of a universal petechial rash, or it may be a massive eruption confined to the chest and abdomen. The extent of the rash throws no light upon the prognosis.

Two examples deserve a full description:—

The first case was that of a girl 14 months old, who was admitted into the hospital under Dr. Fawcett in 1900. On July 17th, diarrhœa and vomiting commenced. The child came in on July 20th. On the 25th, an abscess in the neck was opened. Diarrhœa and vomiting continued. At the beginning of August, signs of bronchitis appeared and a rash came out on the left chest. Ten days later there was definite broncho-pneumonia. The rash now extended on to the abdomen. Death occurred on the 18th. At the post-mortem, broncho-pneumonia and ulcerative colitis were found.

The second case, a girl of 2½ years of age, was admitted under Sir Cooper Perry in 1900. Abdominal pains had started on January 1st, and vomiting on the next day. From that time, nothing had been passed by the rectum, but a little blood and mucus. On January 6th, she was admitted obviously gravely ill. She was restless, tossing purposelessly about. Her eyes were sunken, staring vacantly. She had, in fact, the abdominal aspect so frequently associated in children with an intussusception.

A laparotomy was at once performed, an ileo-cæcal intussusception was found and reduced. After this, she improved rapidly. Four days after the operation, a rash described as a hæmorrhagic urticuria came out. The patient made a good recovery and left the hospital a month later, but fresh crops of spots continued to appear throughout this period.

This case is really a purpura of convalescence. It is difficult to understand how this rare condition comes about. One hypothesis is as follows: with the improvement in the general health, there is a rise in the blood pressure. Some of the smaller vessels do not keep pace with this improvement and so are compelled to give way under the new strain.

The embolic group is represented by one or two cases of general tuberculosis. One example will be quoted in detail.

A boy, aged 3, was admitted into Clinical in 1903. He had been seedy for three weeks. On September 2nd he had well-marked broncho-pneumonia. On September 3rd an eruption appeared on the chest, neck, arms and abdomen. Some of the spots were large and palpable. He was admitted as a case of hæmorrhagic measles. On September 5th he began to pass blood per rectum. On the 7th hæmaturia started, and on the 10th he vomited large quantities of blood. His temperature ranged between 101° and 103°. On September 13th he collapsed and died. The autopsy showed that death was due to generalised hæmorrhagic tubercle.

The purpura of whooping cough must be mentioned here for the sake of completeness. It does not come into any of the three groups, as its origin is purely traumatic, the result of the obstruction to venous return produced by a paroxysm of coughing. This condition does not influence the immediate prognosis, but it emphasises the fact that pertussis throws a severe strain upon the heart, and is quite capable of inflicting permanent injury upon the valves and crippling the heart. There is a rare form of petechial rash, similarly produced, said to occur in epileptics.

(To be continued.)

Guy's Hospital Musical Society.

AN excellent evening concert was given by the Guy's Hospital Musical Society, on Tuesday, May 1st. This was arranged for the laudable purpose of helping the Million Shilling Fund, and we learn that about £12 was realised. The Society, under the able direction of Mr. Henry Taylor, did their work well. They kept good time, light and shade were well marked, and the expression was the best they have attained for many years. The attack at the opening of several part songs was not quite satisfactory, and in this the ladies were mostly to blame, for many of them kept their eyes glued to their music, and seldom favoured the conductor with a glance. Also there were a good many ladies who, in singing, barely opened their mouths.

The solos were well rendered, technically, but entirely without fervour. There were some in the audience who hoped for passion! But won't someone give us a little warmth occasionally? There seems to be a taboo against the expression of feeling at this Hospital.

The opening part song, "It was a Lover and his Lass" (Booth), was sung with spirit. This was followed by a pianoforte duet from Peer Gynt, by Nurses Clifford and Taylor. Mr. W. S. Kidd, who has a good flexible baritone voice, sang (*a*) "Earl Bristol's Farewell," and (*b*) "See where my love a-maying goes," which he rendered delicately. Sister Mary sang "Because," and was followed by two part songs, (*a*) "Ave Maria," (Smart), and (*b*) "Lullaby of Life." Nurse St. John, whose singing is always appreciated, sang, "O that we two were maying" (Nevin), but the song would have been more pleasing with less *tremolo*.

Miss Woodward gave a violin solo, Beethoven's "Romance," accompanied by Nurse Nunn. Next followed a part song, "The Drowsy Woods," Mr. Greene singing the solo to a humming accompaniment. Nurse Cockin and Nurse Archbold rendered a vocal duet in a very business-like manner. The Choir then sang a delightful poem, entitled "Daybreak," which was followed by a song by Sister Lydia, two recitations by Sister Cornelius, and a part song, "The Miller's Wooing," by the full Choir.

Mr. G. A. Ticehurst opened Part II. of the Programme with a delightful pianoforte solo from Grieg, which was highly appreciated. The Choir then sang Elgar's well-known cantata, "The Banner of St. George," a great favourite, in which the solos were beautifully sung by Nurse St. John.

Change of Address.

Lieutenant H. V. Bagshawe, R.A.M.C., from Rangoon to Shwebo.

Dr. Hugh Barber, from Guy's Hospital, to 57, Friar Gate, Derby.

Dr. A. Mantell Daldy, from 25, Claremont Road, Surbiton, and 7, Richmond Road, Kingston-on-Thames, to 17, Palmeira Square, Hove, Brighton.

Captain F. H. Hardy, R.A.M.C., from Colchester to Warley.

Major E. S. Marder, R.A.M.C., from Canterbury to Brighton.

Mr. P. H. Hayes Palmer, L.D.S., of 112, Harley Street, from 6, Cumberland Mansions, West Hampstead, N.W., to 70, Crediton Road, Hampstead, N.W. (Private Address).

Dr. Edward W. H. Shenton, from 67a, Harley Street, W., to 126, Harley Street, W.

Captain J. C. B. Statham, R.A.M.C., from Netley to South Africa.

Lieutenant M. C. Wetherell, M.B., R.A.M.C., from Rawal Pindi to Attock.

Dr. Angus Wylie, from Public Hospital, Georgetown, British Guiana (Colonial Medical Service), to private practice at 91, Middle Street, Georgetown, British Guiana.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Obituary.

Samuel Prier.

We record to-day, with very genuine regret, the death of Mr. Samuel Prier in the 81st year of his age.

To the present generation he, probably, would be, all but entirely, unknown, though there must be hundreds of old Guy's men living to whom his name would be a household word.

Entering the service of the Governors as far back as 1841, Mr. Prier received the appointment of Assistant Museum Keeper. In the old Museum he spent some six years, coming in close contact with the giants of those days —Addison and Bright. About the year 1847, he was offered by Treasurer Harrison a post in what was then known as the "Steward's" Office.

The appointment in 1853 of Dr. Steele as "Superintendent" found him Senior Clerk there, a position he occupied for the rest of his official life.

To the duties of this post he brought untiring energy, perfect honesty and a manly courage. Standing up for the interests of the institution against all comers, his upright courtesy did not fail to produce, amongst all those who had dealings with him, the impression that Guy's had indeed in him a true and faithful servant.

As he possessed most excellent health, it was with quite a shock that all at the Hospital heard, in September, 1903, of his sudden collapse. Though paralysed on his right side, he enjoyed a fair measure of health, and with characteristic pluck at once taught himself to write very well with his left hand. Two months ago a second stroke incapacitated him, and he passed away on the 24th April. The Governors, on his retirement, granted him his salary for life as a mark of their high appreciation of his upright character and faithful service, and were represented at his funeral by Mr. Williams and Mr. Wells.

Hugh Arthur Higgens,

L.R.C.P., M.R.C.S.

The name of Hugh Arthur Higgens, whose untimely death in his thirty-first year we deeply regret to record, will be long cherished by those who knew him here at Guy's, not less indeed than by those—a circle ever widening of late years—who appreciated his character and valued his services. He was one who did not need to make any effort in the display of manly qualities, they were a natural part of him, and in spite of a long struggle against ill-health, he had made notable progress in the exercise of his profession. A sound sportsman, a clear-headed man of business, and a firm friend, he established himself a favourite amongst rich and poor, both in Hampshire and in Jersey. A message from the Island addressed to his family by a public body lies before us as we write, and well expresses the feeling generally entertained by those who knew him. "By geniality and unfailing courtesy, he endeared himself to all with whom he came in contact."

Mr. Higgens entered Guy's as a student in 1894, and some years later obtained the diploma of M.R.C.S., L.R.C.P. Owing to ill-health he was forced to leave London and settle down in the country, moving after a time to Jersey, where he rapidly won popularity. His death deprives the profession of one of its most earnest and painstaking members, and Guy's of a warm friend.

Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council :—

Clinical Assistants in Medical Wards.—Messrs. C. W. Ponder (Dr. Taylor); H. V. Mitchell (Dr. Hale White); J. T. Smalley (Dr. Pitt); W. H. Miller (Sir C. Perry).

Clinical Assistants in Surgical Wards.—Messrs. R. S. Harper (Mr. G. Bird); B. B. Metcalfe (Mr. Symonds); T. E. A. Carr (Mr. Lane); C. F. L. Leipoldt (Mr. Dunn).

Ophthalmic Dressers.—Messrs. M. M. Earle, C. E. M. Jones (May 1st) (Mr. Eason); J. L. Rankine, C. M. Ockwell (May 1st) (Mr. Ormond); E. L. R. Norton, H. C. Malleson (June 16th) (Mr. Eason); A. T. Rivers, E. T. Morgan (June 16th) (Mr. Ormond).

Surgeons' Dressers.—Messrs. N. Flower, A. L. Foster, J. W. Grice, M. R. Dobson, E. Abdy Collins, T. H. Edey (Mr. G. Bird); G. G. Timpson, C. H. Rippmann, K. H. Digby, S. H. C. Air, B. H. Palmer, W. W. Cook (Mr. Symonds); R. B. Dawson, H. P. Aubrey, E. P. Minett, L. Croft, M. D. Price, J. B. Martin (Mr. Lane); H. B. Carlyll, F. Morres, J. B. Ball, C. D. Roberts, M. J. Rattray, L. L. C. Reynolds (Mr. Dunn).

Obstetric Dressers.—Messrs. P. F. McEvedy, A. Zorab, C. W. Greene (Dr. Horrocks); C. A. L. Mayer, J. E Hodson (Mr. Targett).

Externs.—Messrs. L. D. Stamp, J. N. Watson, G. W. Dryland, R. R. Walker, H. J. Henderson (May); J. W. Featherstone, A. V. Ledger, B. Wallis, A. T. Densham (June); H. F. Joynt, E. B. Hinde, P. J. Kolaporewalla, M. A. Rahman, C. B. Ticehurst (July).

Athletic Club.

At the annual general meeting, held on Thursday last, the following were elected as officers :—President, Mr. Clement Lucas, F.R.C.S. Secretaries, W. H. Watson, H. N. Eccles. Committee :—Any year, C. W. Greene; 5th year, J. L. Rankine, R. G. Oram; 4th year, M. M. Adams, H. Stott; 3rd year, V. Townrow, R. Rankine; 2nd year, S. B. Stringer, F. C. Endean; 1st year, C. King, W. Llewlyn.

The annual sports meeting will probably be held during the first week in June, and, at all events, the United Hospital Sports will take place during the first ten days of next month.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-fourth List of Collections.

(Received up to Thursday, May 3rd, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections.

Name.	Shillings.
Amount previously acknowledged ...	70,623½
Austin, Miss—H. Adnitt	21
Beale, H. J. (76½s.)—L. B. Brown	10
Bown, Rev. P. H. (20s.)	20
Bright, Sister (937s.)—Mr. Price	10
Conservation, Sister (20s.)—Further Collection ...	14½
French, Mrs. Herbert (80s.)—A. A. Contanche ...	30
Guthrie, Miss M. (26s.)—Collection	8
Henderson, H. J. (279½s.)—Marlborough Private Subscription Dances	420
Kate, Sister (272s.)—Miss Margaret Kennard ...	5
Leedham, Miss (100½s.)—Collection	7
Louisson, Dr. M. G. (5s.)—A Dramatic Performance at Queen's Hall (proceeds of)	662½
Lydia, Sister (118s.)—A Patient	20
Reinhold, Dr. C. H. (5s.)—Miss Jessie Farre ...	10
Tipping, Dr. H.—Collection	30
Woodward, H. M. (147s.)—Col. Crosbie 1, Capt. Kerans 1, Capt. Finch 1, Collected by Miss Crosbie 7	10
Young, Dr. F. C. (22s.)—Miss Bertha Bullock ...	12
	71,913½
Further collections from sources outside the Hospital	41
Total (up to 3rd inst.)	71,954½

From the Gazette's Special Pathologist.

NOTICES.

H. L., Manchester.—This growth is an endœthelioma such as would originate in connection with the mucous glands of the lip. Such formations are usually not malignant.

G. M. J., Alton.—Tubercle bacilli are present in small numbers in this specimen of sputum.

PATHOLOGIST.

The Year's Work.

The Various Departments.

The changes on the Board of Governors and on the Staff during the past year are known to all of us. The report, however, serves as a reminder of what we have lost and what we have gained. "The death of Mr. A. J. Lawrence, C.I.E., deprived the Governors of a valued colleague, who, since his election to the court in 1894, had taken active part in their deliberations. During the year Captain the Hon. H. H. Molyneux, R.N., Mr. W. Cunliffe, Mr. R. Cavendish, Mr. R. Fleming and Mr. A. Merry were elected to the Corporation." The changes in the Staff, chronicled in full in the report, need not be referred to here, as they will be fresh in the minds of our readers.

In the section of the report headed "Administration" are many interesting details, from which we abstract the following:—

"The Change Ward, provided by the adaptation of a portion of the old Nurses' Dormitories in the Surgical Building, was completed last year. To this ward patients from Luke Ward were transferred, and the renovation of Luke was taken in hand. Two septic wards, Patience and Samaritan, still require renovation, but having regard to the financial position the Governors resolved that no further extraordinary expenditure in the Works Department should be incurred until further orders.

"The present building staff is made up as follows:—One foreman of works, one clerk, one bookkeeper, two carpenters, with one labourer and one machinist; three bricklayers with two labourers; one plasterer with one labourer; two plumbers with two labourers; two scaffolders; eight painters with three labourers; one mason with one labourer, and one storekeeper. In the Engineering Department there are three fitters with three labourers, one smith, one striker, one wireman with one labourer, making a total of 44 persons, whose wages at current rates amount to £4,023 10s. per annum.

"The Central Station, Laundry, Henriette Raphael Nurses' Home, and the means of supply for light, heat, water and power throughout the hospital having been practically completed, the services of a Resident Engineer became no longer essential, and the Governors accordingly terminated the appointment of Mr. W. H. Barnes, with appreciation of his zealous services, from the drawing of his first plans and the difficult excavations for the foundations of the new buildings, to the eventual application of electric light to the joys of Christmastide in the wards.

"In 1905 the hospital used 237,503 units of electricity, produced from our own resources at a cost of a little over a penny per unit, and more than 41 million gallons of water pumped on the premises. The Central Station also supplied the hospital buildings with steam. During the year

1,214,875 pieces were washed in the laundry for the general uses of the hospital.

"In the Electrical and Actinotherapeutic Department extensive alterations and improvements have been made, and it is now fully up to date. During the year a light bath and new X-ray apparatus have been added. The average number of daily treatments is about sixty, but the number is rapidly increasing. Paying patients are now received for treatment in the light department, the fee for an attendance card for twenty-four sittings being £6. In taking this step the Governors were actuated by the desire to recoup themselves in part for the many expenses incidental to the maintenance of this large department, in which poor patients are treated free, but they are desirous that paying patients should attend only upon the recommendation of a general practitioner, and that their circumstances should be such as to render them deserving of treatment which, though not entirely gratuitous, is less costly than if obtained anywhere than in a hospital.

PATIENTS.

"A greater number of patients, both in-patients and out-patients, were treated in 1905 than in any former year, although the increase over the 1904 total was necessarily but slight compared with previous advances. In-patients accommodated during the past year numbered 8,626, as against 8,581 in 1904. Of the number treated, 6,855 were discharged as cured or relieved, 478 as unrelieved, and death occurred in 792 cases, as compared with 789 deaths recorded in 1904. The remainder were in continued occupation of beds at the commencement of 1906. The cases were divided into 2,902 of a medical and 5,724 of a surgical nature, which represented a decrease of 13 in medical cases and an increase of 58 in surgical cases as compared with the previous year. The average number of beds in daily occupation rose from 5,155 in 1904 to 5,263, which, considering the number of beds and cots available (602), very nearly approached their fullest possible use. There were 1,270 accident cases treated as in-patients—a record number—of whom 125 died, giving 9·8 as the percentage mortality in accident cases. The average mean residence of medical patients was 35·9 days; of surgical, 17·7. The rate of mortality in medical cases was 20·5, in surgical 4·5, giving a mean mortality of 9·7—a figure which corresponds to that obtained during the previous year. Some 703 in-patients were enabled to obtain the benefits of residence at a Convalescent Home through the agency of the hospital.

"A record number of 137,792 persons were treated as out-patients during the year. Of these, 84,609 were casualties and urgent cases; 13,425 were medical cases, 6,996 were surgical, and 16,534 were dental cases. These figures show an increase in nearly every department, with the exception of medical and dental cases, in which there was a slight decrease as compared with the 1904 figures. The Out-patient Visitor's report states that of 39,469 new out-patients interviewed by her, and from whom particulars of their circumstances in life were obtained, only 151 persons were found ineligible to receive the benefits of the Charity.

"The daily average of new patients seen at the Out-patient Department was 449, while the daily average of separate attendances was 1,045.

NURSING.

"There has been no alteration in the number of nurses. The total nursing staff in 1905 was 276 persons. One hundred and three pupils, selected from a large number of applicants, entered the training school during the year. Ninety-three of these satisfied the examiners and went into the wards to fill such vacancies as occurred in that year. For National and Imperial Service the Staff last year provided one matron and two sisters, Civil Hospital, Kandy, Ceylon; one matron, Children's Hospital, Birmingham; one matron, Cottage Hospital, Tavistock; one matron, St. Mary's Hospital, Plaistow; one matron, Cottage Hospital, Warminster; one matron, County Hospital, Gloucester; one sister-in-charge, Surgical Nursing Home; one sister, Chelsea Royal Hospital; one sister, Radcliffe Infirmary, Oxford; one sister, St. Catherine's Hospital, Cawnpore, India; one nurse, Queen Alexandra's Imperial Nursing Service; two nurses, Queen Victoria Jubilee Institute; two nurses for private nursing at Shanghai, and 40 nurses for private nursing."

Pass List.

University of Durham, April, 1906.

THIRD EXAMINATION FOR THE DEGREE OF BACHELOR IN MEDICINE.—J. F. Young.

SECOND EXAMINATION FOR THE DEGREE OR BACHELOR IN MEDICINE.—L. W. Evans, A. C. Greene, S. L. Randolph.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR IN MEDICINE.—W. Reynolds.

ELEMENTARY ANATOMY AND BIOLOGY.—G. E. W. Lacey.

CHEMISTRY AND PHYSICS.—E. W. Blake.

Final Conjoint Examination, April, 1906.

MEDICINE, SURGERY AND MIDWIFERY.—*C. W. Greene, *R. Davies-Colley, *A. S. B. Bankart.

MEDICINE AND MIDWIFERY.—C. W. Ponder, P. F. McEvedy, E. Morgan.

SURGERY AND MIDWIFERY.—*R. S. Harper, H. C. Malleson.

MEDICINE ONLY.—P. C. Litchfield, B. B. Metcalfe, H. G. Gibson, W. C. McN. Dickey, R. Franklin.

SURGERY ONLY.—W. H. S. Burney, *C. F. Fothergill, *R. A. Greeves, *A. M. Roome, *H. F. Vandermin, *J. O. Musson, *G. Wacher.

MIDWIFERY ONLY.—G. W. Goodhart, *T. Turner, A. T. Rivers, *G. N. Bartlett, J. S. Farnfield.

*Denotes completion of examination.

Appointments.

Civil.

Mr. L. A. DUNN, M.S., F.R.C.S., has been appointed an Examiner in Surgery in the University of Cambridge for the 3rd M.B., Part II.

Naval.

Staff-Surgeon E. S. TUCK, R.N., has been appointed to the *President*, additional, for a three months' course at Guy's Hospital.

Novelties.

The Holborn Su gical Instrument Company.

To most Guy's men this firm is familiar enough, and their new Catalogue of Surgical Instruments and Appliances is well worth glancing at. The instruments which this company turn out are comparatively cheap in p ice, though excellent in workmanship and finish. A novel feature, and one which is sure to be popular, is their new set of surgical instruments, catalogued at £25—a complete assortment of instruments essential to surgeons commencing to practise. The list, the outcome of a competition for a series of prizes offered by the Company for the best list of necessary and most useful instruments that can be acquired at an outlay of not exceeding £25, is as full as one can reasonably expect it to be at that figure. The Company's large stock of instruments is well worth inspection, and those who are unable personally to view the instruments, will find every particular necessary for ordering in the catalogue.

Notices.

Medical Pathology Demonstrations.

Dr. Fawcett will give two Demonstrations on Saturdays, May 12th and May 26th, at 11 a.m., in the Gordon Museum, on "Some Pathological Specimens, with interesting Clinical Histories."

A three months' course of Practical Pharmacy will commence on Monday, May 7th. Further particulars may be obtained from Mr. Finnemore, at the Dispensary.

A course of advanced lectures in Physiology will be given in the Physiological Theatre during the Summer Session. The subjects will be:—"The Regulation of Body Temperature," "Life and Mechanism," by J. S Haldane, M.A., M D., F.R.S., Lecturer on Physiology in the University of Oxford, Thursdays, 4 p.m., May 3rd, 10th, 17th and 24th. "Pigments—Pigmentation," by F. G. Hopkins, M.A., M.B., D.Sc., F.R.S., Reader in Physiology in the University of Cambridge, Thursdays, 4 p.m., May 31st, June 7th, 14th and 21st.

Birth.

CHANING PEARCE. — On April 19th, at 88, St. James's Road, West Croydon, the wife of A. Chaning Pearce, M.D., of a daughter.

Marriages.

BARBER—HOWLETT.—On April 24th, at St. George's, Tombland, Norwich, by the Rev. W. F. Crewe, Vicar, Hugh Barber, M.D. Lond., son of Mr. and Mrs. Christopher Barber, of Sheffield, to Ethel Mary, daughter of Mr. and Mrs. J. G. Howlett, of 36, Bracondale, Norwich.

DENHAM—LILLICO.—On April 28th, at the Parish Church, Croydon, by the Right Rev. the Lord Bishop of Croydon, assisted by the Rev. L. H. Burrows, M.A., Vicar, and the Rev. W. M. Shepherd, M.A., Norman, third son of Chas. H. Denham, of South Norwood, to Eleanor Winifred, eldest daughter of William Lillico, Mayor of Croydon.

MOYLE—KENDALL.—On April 21st, at the Parish Church, Kingswear, South Devon, by the Rev. F. Walker, Reginald Moyle, M.R.C.S. Eng., L.R.C.P. Lond., second son of J. Alfred Moyle, Esq., Brook, Totnes, South Devon, to Ellinor Mary (May), only child of W. B. Kendall, M.R.C.S. Eng., L.R.C.P. Ed., Greenhays, Kingswear.

MURIEL—OWTRAM.—On April 25th, at the Church of St. John-the-Baptist, St. John's, Woking, Surrey, by the Rev. H. Langham Muriel, M.A., Priest-Vicar of Lichfield Cathedral, brother of the bridegroom, assisted by the Rev. Wm. Bury, M.A. (Rural Dean), uncle of the bride, Geo. Bertram Muriel, M.B , B.C. Cantab., second son of Mr. and Mrs. G. J. Muriel, The Retreat, Whitehaven, to Janet Beatrice, youngest daughter of Mr. and Mrs. H. C. Owtram, of The Dawn, St. John's, Woking.

PENDRED — MATTHEW. — On April 23rd, at St. Barnabas, Addison Road, Kensington, by the Rev. J. Grant, M.A., assisted by the Rev. T. Guy Rogers, B.D., Vaughan Pendred, M.D., F.R.C.S. Eng., of Coventry, eldest son of Vaughan Pendred, M.I.M.E., and Mrs. Pendred, of Crohill, Pendennis Road, Streatham, to Beatrice Elizabeth, younger daughter of Dr. and Mrs. Mordaunt Matthew, of 22, Holland Road, Kensington, W.

ROBINSON — HORSLEY. — On 30th April, at the Church of St. John the Baptist, Croydon, by the Rev. L. H. Burrows, M.A., Vicar of Croydon and Rural Dean, James Frederick Robinson, F.R.C.S. Eng., of 105, Park Lane, Croydon, eldest son of James Robinson, of Offerton, Beddington, Surrey, to Francis, third daughter of Henry Horsley, M.R.C.S., of London Road, Croydon.

Deaths.

BENTLEY.—On April 24th, at Haworth, Mitcham, Harold Desmond, son of Harold Bentley, M.R.C.S., L.R.C.P., aged 15 days.

HIGGENS. — On April 18th, at S. Aubin's, Jersey, Hugh Arthur Higgens, M.R.C.S., L.R.C.P., aged 30.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

VOL. XX., No. 468.] MAY 19, 1906. [SIXPENCE.

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Passim.

WITH the commencement of the new Session, a great many changes are taking place in the Dental School, as well as in other departments of the hospital. The freshmen are safely ensconced in their new quarters, where, we trust, they will find that measure of happiness possessed by all who take the name of Guy's men and live the hospital life in its widest sense. The vast possibilities of the department for the most zealous worker require no mention, and with a dental man captaining the cricket eleven, what encouragement is thrown out to our athletic friends, of whom there must be many among the stalwarts of the new entry! With the close of the final examinations last week, we are once more the proud possessors of an honourable pass list at the College, and there will be many familiar faces disappearing from our midst in the course of the next few days. Past students alone, we suppose, can realise the feelings of the old stager, as he makes his way round the Conservation Room, bidding good-bye to the men by whose side he has worked. The joy of getting through, the feeling of gratitude to the staff for their inestimable help and kindness from beginning to end, the hope of success in the future, all help to tighten the cords which bind dental men to Guy's and the Dental School.

WITH this inevitable change, the GAZETTE, too, has to reckon. Mr. H. E. Marsh, who has for so long a period acted as Dental correspondent, is unable to continue his services in that capacity, and the Dental Society, at its annual general meeting, has elected a new correspondent to fill the vacancy caused by his retirement. We owe a great deal to Mr. Marsh for his kindly help and interesting contributions during the time he has been connected with the GAZETTE, and we are sensible that in losing him we lose one of our ablest and most energetic collaborators. We are sincerely grateful to him for his services in the past, and we trust that in the future we shall receive many more interesting notes from his pen.

NURSE STEVENS, who a few months ago retired on pension, was one of the best-known and most popular members of the Nursing Staff. Her connection with Guy's dates back to 1879, when she entered the wards as a probationer, soon afterwards being promoted to the post of Staff Nurse, and she will be known to and remembered by all students who have passed through their hospital course during the last twenty-five years. During the past few years her duties lay in the Out-Patient Department, where she was unfailing in her attendance on patients, and where her genial kindness and good humour made her deservedly popular with everyone who came to know her. Through her retirement, the Nursing Staff loses one of its oldest members, and the Hospital a willing and devoted worker.

The additions to what may be called the antiquarian corner of the Museum, of which we give brief particulars elsewhere in this issue, are extremely interesting, and will, moreover, serve to direct attention to this part of the Museum collection, which most Guy's men are in the habit of neglecting. Surely there are many other objects of historical and general interest which may find a place in the show-case. The new exhibits have an added interest owing to the fact that they come from Dr. Cock, who was practically the founder of the collection, but whose example, it is pleasant to report, has already stimulated other Guy's men to take an interest in it. The collection is as yet small, but it contains some very good specimens, and doubtless in course of time, when more attention is paid to it, it will grow to rival the fine display of old instruments and apparatus on show at the Lincoln's Inn Fields Museum.

We have on various occasions been compelled to draw attention to the complaints about the College catering, and it is, therefore, with a keen sense of gratification that we are able to chronicle a change for the better in the arrangements of the dining-hall. Those extensive alterations to which Mr. Ormond referred at the meeting, when the subject of the College fare was under discussion, are on the eve of completion. Some of us have been inclined to think that far too much has been made of these alterations, but as a matter of fact, they have had a great deal to do with the badly-served food and the half-cold dishes and plates at the College dinners. If anyone doubts this statement—and we must confess that up to a few days ago we would have doubted very much indeed if the progress of building alterations in the lower regions of the College could have been responsible for all the misery inflicted on those who took their meals in the dining-hall—a walk round the partly-finished kitchen will readily convince him of its truth. We frankly admit that we did not realise the extent of the alterations, and consequently the difficulties under which the kitchen department suffered. Nor, we believe, did any of those who complained realise either. Ordinarily, and in another club, such extensive building operations would have necessitated complete closing of the kitchen, and, as a result, an interruption of the dining-hall arrangements far greater than we have had reason to complain of; but here the steward has gone on and done his best to keep the dining-hall going. That he has not succeeded very well is, under the circumstances, not to be wondered at. The kitchen has been in that state of disorder and disturbance which inevitably results when there is a division of interest and responsibility. The builders took charge of it during the greater part of the day, and the cooks remained at work under most irritating and vexatious conditions—conditions, in fact, which would have ruined the temper of any chef who regarded his trade as an art. For a time the work has had to be done in what amounts to a mere corner of an unusually roomy and respectable kitchen, and with only a part of the apparatus available for use.

Now, we are glad to say, matters are better, and already we hear that there is an improvement in the food, and in the manner in which it is being served up. A new gas grill has been added to the kitchen appliances, and in the small serving room attached to the dining-hall a thorough system of hot-water pipes and gas-heated counters has been installed. With these in proper working order, as they are at present, there ought to be no further complaints that the plates are cold. All the arrangements are not yet completed, but they are nearing completion, and members' patience will not be tried much longer. We shall be interested to hear how the change is appreciated, for we are sure that members will be as ready to show their appreciation of any betterment in the catering as they have been to mark their disapproval of its faults during the past half-year. At the same time, we would remind members that, in the opinion of the steward, they can do a great deal to help the management and simplify the work of the staff in connection with the dining-hall by taking their meals somewhat earlier than they now do.

Once more we beg to draw the attention of students to the Pupils' Physical Society's invitation for papers. It is highly desirable that the Secretaries of the Society should know the subjects and titles of any proposed essays, so as to be able to draw up the annual programme card, and these particulars should be sent in before September 1st at the latest. The Society offers several prizes, which are open to members, and, as we have already pointed out, every student on the books of this Hospital, no matter in what year he may be, is a member of the Society. It is to be hoped that during the coming winter session the meetings of the Society will be better attended than they have been during the last session.

OUR congratulations to Mr. H. F. Bell Walker, who has won the Murchison Scholarship in Medicine.

IT is always a pleasure to receive suggestions for the improvement of this paper, and the hint that Dr. Gibson throws out in his letter, which appears elsewhere, is one well worth considering. It is a point, however, on which we should like to have the opinion of our readers generally. To give effect to it, that is to say, to re-publish the clinical lectures in book or pamphlet form at the end of the year, would entail so much extra expense that it is not to be contemplated seriously unless there is a more or less unanimous demand for such reprints. Hitherto, we have been under the impression that the majority of readers had their Gazettes bound, and kept the volumes as interesting links with their old hospital. But flattering as such an impression may be to those who are responsible for the production of this paper, it is nevertheless true that a great deal of what appears in each of our issues is ephemeral, and perhaps of little interest to men outside the hospital, to whom the journal is chiefly valuable because it attempts to reproduce, more or less faithfully, the series of clinical lectures which are delivered every session. The added matter, which under present conditions is bound up with the clinicals, undoubtedly detracts from the value of the GAZETTE as a work of reference, but there does not seem to be any method by means of which this difficulty may be overcome. If any reader has a suggestion to offer with reference to this matter, we shall be glad to take it into consideration.

THE other point which Dr. Gibson raises, the splitting of individual lectures and papers, is on a different footing. No amount of management can prevent such splitting in cases where the articles are too long for insertion in full in one issue. Mr. Lane's lecture, we may point out, was really delivered in two parts, and therefore its division did not affect smoothness of reading or involve any perplexing interruption of continuity. With Mr. Macalister's paper the case was different, and its length and the series of tables appended to it made it necessary to insert it in halves, regrettable as it was to divide it. There is, however, a point in connection with the matter which, as it is possibly unknown to the majority of our readers, may be alleged as excuse for a proceeding which appears like unnecessary mutilation. The ordinary issue of this paper consists of twenty pages of printed matter: the addition of extra sheets entails an increase in the postage, and consequently an excess in the cost of issue which is a serious matter for the publishing department. That is a fact for which the Post Office is responsible. It is a somewhat anomalous condition of affairs that the GAZETTE, which is published fortnightly, and therefore cannot claim the privileges granted to registered newspapers, should be debarred from enjoying the benefits which more bulky, and perhaps heavier, weekly magazines enjoy, but so long as it continues we do not see how we can prevent the mutilation of articles against which our correspondent protests.

LIKE Chatterton's love, the *Guyoscope* has "gone to its death-bed," and its demise will be regretted by the large number of subscribers, both regular and casual, who of late days looked forward to its monthly advent. To the expressed regrets at its death let us add our own feeling of sorrow that it has not been able to survive the ill-fortunes and difficulties which, like man-traps and spring guns in a game preserve, lurk in the path of every newly-started paper. Yet, in a measure, it would be unfair to attribute its surrender to what some of us hoped would not be the inevitable, to a lack of support, a want of appreciation, or a diminution in the sense of humour at this hospital. It received support, it gained appreciation, and its existence has proved, more or less conclusively, that the lode of humour into which its archetype dug in bygone years has not wholly petered out. Whether the refined ore which it brought to light was as pure and as unalloyed as that which the old firm put on the market must for ever remain a question on which there will be variety of opinion and diversity of feeling. For our part we can safely say that, in the later issues at least, we found much that, to our may-hap prejudiced eyes, seemed good metal, of full carat, and with little dross. Certainly there were less exactly pure passages, but they may be passed, for this moment at least. There is no necessity, even in a paragraph which is of necessity an obituary, to criticise an undertaking which has done some good and which has certainly not done any harm. That the *Guyoscope* fails, after a six months' struggle which it conducted soberly enough for a paper that professed to be always in motley, is due solely to the want of someone to continue its management with the same care and painstaking solicitude which Mr. May has devoted to the editorial task. Both he and his staff of contributors,

who have every reason to be proud of their work for the paper, are willing to continue their services, and it is to be hoped that, even at this, the eleventh hour, someone may be found willing and able to take on himself the work of editing the paper. If the hope remains unrealised, we can only once more express our regrets that our little contemporary should cease to exist, and our thanks for the manner in which it has attempted to enliven the somewhat dull tenor of hospital life.

Pupils' Physical Society.

The Secretaries of this Society will be pleased to receive the names of members of the Clubs' Union who are desirous of reading papers before the Society. Names and titles of papers should be sent in before the 1st September. A prize of £10 will be awarded to the author of the best paper.

The subject for the Treasurer's Prize Essay will be announced later.

The following names have been added to the list of Presidents:—C. W. Greene, G. H. Goodhart, H. S. Knight, P. P. Laidlaw, T. B. Layton, C. F. L. Leipoldt, H. Mann, G. W. Nicholson and C. H. Rippmann.

W. M. MOLLISON, H. F. BELL WALKER } Hon. Secs.

Novelties.

Medical Reserve Brandy.

Among the drugs on the market not one is, perhaps, put up in so many diverse forms as alcohol, and the brands are so numerous, and their individual claims so various, that the ordinary practitioner, who is unable to test the merits of the respective brands recommended to him, must find it rather perplexing to choose between them. The points which appear desirable in a brandy suitable for medicinal use are :—1, a sufficient percentage of alcohol ; 2, freedom from irritant secondary products ; and 3, a flavour more or less pleasant to an invalid. We have had occasion to try the "Medical Reserve" brand produced by the well-known firm of Fromy Rogée et Cie—a brandy which has earned the commendation of so exacting a critic as the *Lancet*. It undoubtedly possesses the qualities which are essential, and which are claimed for it, and the secondary products in it are remarkably small. Possibly for that very reason it is slightly deficient in flavour. It is a sound, reliable article, and as such can be highly recommended for medicinal uses.

Renal Colic and Calculus.

CLINICAL LECTURE By Mr. SYMONDS.
February 1906.

Gentlemen,—There are two patients in Job ward at the present time with renal colic, and I propose to occupy the time to-day in discussing the cause of this complaint.

The first case is that of a man, Samuel C., æt. 40. The report has been made by my ward clerks, Mr. W. Johnson and Mr. J. Walker. This patient gave the following history. For five years he has been subject to attacks of pain in the right loin, passing, during the severe paroxysms, down into the groin. He distinctly remembers that the first attack of pain began while he was stooping to attend to a fowl-house. He got up, rubbed his loin, went in, laid down, and the pain passed off. For three or four months he was free. The longest interval he has had is ten months. He had of late two or three attacks in a month, and would be laid up at home a week at a time. The attacks have become so frequent that since August he has not done any work. He finds, also, that by lying down the moment the pain begins an attack is sometimes prevented. His particular work is shaving skins—an occupation requiring constant stooping, and raising of the body, as the blade is drawn towards him. A pain of a dull aching character is nearly always present in the loin ; when severe it is of a sharp shooting character, and is felt along a line one inch above and parallel to the centre of Poupart's ligament. The attack begins with rumbling in the anterior lumbar region, and spreads down to the groin, gradually increasing in severity. It comes suddenly when at work, on walking home, after tea, or in an omnibus. Sometimes he has had to lie down for several hours in the workshop, or even for a short time in the street. In the early part of the attack he eructates wind, but has only once been sick.

For treatment he goes home, has hot flannels applied, lies before a fire, and after some hours the attack passes off. The pain has never passed down to the scrotum, nor has there ever been increased frequency of micturition during an attack. There is no history of the evacuation of a large amount of urine as the pain subsides. He has never passed blood in the urine to his knowledge. On one occasion the urethra became blocked with a "sediment," which after some manipulation he passed. He says his medical man tried to dissolve this in boiling water,

without success. During the last three months the attacks have been much more frequent.

On admission.—He is a fine, strong, healthy-looking man with powerful muscles, and a bright cheerful disposition. The right loin on manipulation is not tender to any marked extent, nor is there any enlargement of either organ to be felt.

The urine passed amounted to 32-34 ozs., had a specific gravity of 1020, and 2·6 per cent. of urea. Blood cells were reported absent.

An X-ray examination was made by Mr. Shenton, who reported: "There is no evidence of calculus in this kidney. The negative is of the best possible type for a renal stone."

Diagnosis.—Of the four forms of "colic" occurring on the right side—viz., renal, appendicular, hepatic and intestinal, the last may be dismissed at once. For the "enterospasm" does not occur in such subjects, the pain is never so severe, and there is in our patient no associated unhealthy intestinal secretion. For appendicular colic the pain is too definitely in the loin, and moreover passed *from* there down to the groin. The attacks again are too frequent, sharp and brief for kinking of the appendix. Again, almost invariably after so long a period, the canal becomes blocked, and a definite attack with pyrexia and local swelling takes place. The absence of jaundice excludes gallstone in the common duct, but leaves a possible gall bladder colic. Opposed to such a view, again, are the frequency of the attacks, the absence of local tenderness, and the distribution of the pain. Again, frequent cholecystitis before long gives rise to absorption, to pyrexia, and ill-health.

A renal origin remains as the only adequate explanation, and is supported by the distribution of the pain—i.e., in the loin and groin; the attacks of severe pain have the well-known character of renal colic in suddenness of onset, in severity, in frequency of recurrence, and in being determined by movement; also in the freedom from any following illness, and in the ability to work soon after the attack has passed off. Being renal in origin, the next point was to inquire as to the cause of the pain. The most frequent cause is a calculus in the pelvis, causing pain, partly by direct irritation, and partly by blocking the ureteral orifice and leading to distension. The attack is, no doubt, determined by the displacement of the calculus from some quiet corner of the dilated pelvis. It descends into the ureteral orifice, is there grasped, and sets up severe spasmodic pain.

The X-rays did not help in the diagnosis, or were negatived as to calculus, nor was there any blood in the urine after an attack. The examination of the urine was not so complete as it might have been, for beyond the note that phosphates were present, no record of the prevailing form of crystalline salt is given. Again, the microscopic evidence of blood was not gone into. It is a well-known fact that the daily presence of a few red blood cells, together with a trace of albumen, is an important sign of renal calculus. Again, one would expect that after the irritation of so many attacks the pelvis would be eroded and easily bleed. Still the severity of the pain during the attacks pointed to calculus, and to its presence in the pelvis of the kidney. In attaching so much importance to the degree of pain, the character of the patient has been carefully estimated. He is in no sense a neurotic, but a hard-working, intelligent, vigorous, and robust man, who describes his attacks almost cheerfully. Another reason for expecting that a calculus would be found, and in the pelvis of the kidney, was the frequent determination of the attacks by exercise, suggesting that the stone was movable within the pelvis.

The probability of a calculus being found was so great that the kidney was exposed through the loin and isolated. A rounded calculus was at once felt in the pelvis. The lower end of the kidney was hard, and attached to it was some perinephric new formation. This being dissected off by the finger and a sterilised pad, the posterior aspect of the pelvis was exposed and the stone pressed backward. The pelvis was scratched through and the stone removed. The interior of the pelvis was explored by a steel sound for further calculi. None being found, the muscles were united by catgut, a large rubber drain inserted, and the usual dressing applied.

The stone is oval, of a fawn yellow colour, and studded with many crystalline nodules. It is no doubt a uric acid calculus.

The stone was extracted through an opening in the pelvis, and you will notice that this was left unsutured. The kidney was not easily brought into the wound, though a long incision was made, and it was easier to operate through the pelvis. Apart from this, however, I think it better to remove by this route than to incise the renal substance, *i.e.*, where the pelvis is easily accessible. The persistence of a fistula I have not encountered so far, most of the cases healing by primary union, and these have been a good number. The orifice is usually closed by fine silk or, better, catgut, and a drain invariably employed. In the present instance, the perinephric material interfered with the view for one thing, and for another, the kidney could not

be brought sufficiently well forward. The risk of a fistula I did not consider sufficiently great as to demand suture, not having encountered this unfortunate result up to the present time. The operation was performed on Monday, January 8th, 1906, and the wound ran an aseptic course. There was no escape of urine at all.

The other patient is a man, Joseph N., æt. 30, a painter, whose report has been made for me by Mr. A. W. Ewing and Mr. E. R. Stone. Eight years ago this patient began feeling pain on the right side. It came on quite suddenly during the night and lasted three hours. It was very intense, and the patient sat in bed with his knees flexed. He felt faint and vomited. The next day he was quite well again and resumed work. During the next month he had these attacks of pain, which came on twice a week. They were of the same intensity, but gradually lessened in frequency, occurring every month for about a year. The patient then was without pain of any sort for two years. During this time he was in South Africa. There he had a sprained ankle and was laid up. Soon after his return, in June, 1901, the attacks began again. They now vary in frequency, and recently have been coming on twice a week, sometimes only once a month. The attacks last from six to eight hours, the pain passing finally along the urethra. Two years ago he passed a good deal of blood for three days. He was skiagraphed for stone in kidney. Sometimes he has great pain when he passes water, and his urine is often muddy. The pain is more intense if he micturates during an attack. He has not passed any blood for two years. The abdominal pain seems to be localised around the right lumbar region, and is more intense in the back. Looked healthy, was not constipated, and had never suffered with this complaint at all. Showed no sign of lead poisoning, no blue line round the gums being visible. On examination nothing was to be felt at all in the abdominal region. There was no tenderness, and even after an attack there was no swelling visible. His last attack was on November 27th, 1905, and lasted seventeen hours. On January 4th, 1906, a skiagram of the patient was taken, and Mr. Shenton's report was as follows:—"There is an indefinite opacity in the region of the right kidney. I am not at all sure this is calculus, but think it very likely."

The kidney was exposed through a loin incision, and was easily brought to the surface. The lower end was rounded and evidently cystic; the upper part appeared normal. An incision evacuated a couple of ounces of clear inodorous fluid, containing a considerable amount of white pasty material. This looked like the material from a tuberculous cavity, though it was whiter in colour. The solid part was more like the curd of milk. On enlarging the incision, the cavity was found to be in the substance of the lower end of the kidney. It had a granular lining, but not the ragged appearance of a tubercular cavity. A portion of the wall was removed for examination. Adjoining this was another cavity, well in the substance of the kidney, containing a thinner fluid. Neither of these communicated with the pelvis. The ureter was found dilated and thickened, the channel probably three times the natural size. It was opened near the pelvis, a probe was passed into the kidney and was then forced through into the cyst. No calculus could be felt in the pelvis by the probe or the finger. An ureteral catheter was then passed downwards into the bladder, and drew some urine and passed quite easily. One and a half inches below the kidney a vessel passed *behind* the ureter, and in the displaced position in which the kidney was being examined, produced a distinct infolding of the wall; but when the kidney was replaced to the normal position the ureter did not appear to be constricted. The dilatation, moreover, was as marked below this point as above, nor was there any permanent constriction where the artery crossed. The actual cause of the dilatation of the ureter therefore remained unsettled. The greater part of the kidney being sound, the organ was left. The cyst was drained by a large tube and the wound closed round it. The even dilatation of the length of ureter examined—examined nearly to the pelvic brim—demonstrated that the obstruction must be low down. The catheter, a fine one, passed easily into the bladder, so that the obstruction could not be complete. Again, the enlargement of the ureter was a pure dilatation with hypertrophy, there being no infiltration of tubercular material.

Looking to the man's age and the history, the initial attack eight years ago, followed by a period of two years without symptoms, then another attack with hæmaturia, and then the repeated attacks of colic for which he has sought admission, the presence of a calculus as the original cause seemed the best explanation. This may have caused erosion of the mucous membrane, slowly followed by stenosis. The explanation is weakened by the fact that vesical symptoms did not ensue after either attack, nor is the man aware of having passed a calculus by the urethra. The recent attacks may be explained on the ground that there has

occurred intermittent distension of the ureter and renal pelvis, owing to complete closure of the ureter at the seat of obstruction, probably from folding or kinking. The cysts found in the kidney, being well in the substance of the organ, can hardly have caused the pain, for neither communicated with the pelvis. The vessel found passing distinctly behind the ureter was probably not the cause of obstruction, for no constriction existed; and, moreover, the ureter was dilated below this point.

Looking for other causes of obstruction of the ureter low down, one thinks of a pouch in the wall of the bladder involving the vesical orifice. The instances that have come under my notice of this affection have not been attended by intermittent attacks of pain, resembling those caused by renal calculus. In the absence of dilatation of the ureter, the possibility of undue mobility, leading to kinking over the artery passing behind the infundibulum, must be considered. This mobility may have been increased by the extra weight of the cysts. On such an explanation the dilatation of the ureter may have been due to the passage of a calculus some years ago, and have no relation to the recent attacks.

The treatment in this case aims at, first, obliteration of the cysts by drainage and fixation of the kidney. I will presently relate other cases showing that recovery follows such methods. The portion of the kidney removed has been examined by Mr. Rowlands, who reports that there is no evidence of tuberculous disease. The cysts, therefore, must be left as accidental associations of the dilated pelvis, and only in a secondary way, as suggested above, contributing to the symptoms.

The first of these cases gave a fairly typical history of renal calculus, except for the absence of hæmaturia. In order that you may have a more complete account of the symptoms of renal calculus, I will mention another case. It was that of William B., æt. 62, admitted September 2nd, 1899. Here we had, in addition to the symptoms in the first case, hæmaturia, and hæmaturia occurring at the right moment. For three years this patient stated that he "had weakness in the right side"—a vague statement, indicating probably the existence of lumbar pain of a more or less persistent character. Thirteen weeks ago he was first seized with pain of an acute character, and passed blood. Since then the attacks have been frequent.

On admission.—He was a florid, healthy man. There was no tumour to be felt in the loin, the urine had a good specific gravity, and contained a trace of albumen. One night he had an attack of pain, in which he rolled about in agony, sweated profusely, and had frequent desire to pass water. The pain began in the loin and passed downwards to the groin and scrotum. He passed some bright blood on several occasions during the attacks, which, before he had a hypodermic, lasted some time.

Operation.—On September 6th, 1899, the kidney was exposed through the loin, and its lower and posterior part isolated. A calculus was at once felt, and removed through an incision into the posterior part of a somewhat dilated pelvis. The incision was closed by three fine silk sutures, and the deep muscles also by silk. A drainage tube was inserted. Primary union followed the operation, there being no escape of urine through the loin.

This being a typical case of painful renal calculus, exhibiting all the classical symptoms, I bring it before you in order that you may contrast the record with that of the man Samuel C. There could be little doubt as to the diagnosis.

If you examine the stone, you will see that it is flattened and somewhat three-cornered in shape, the margin being bevelled off to form an edge. In that from Samuel C. the stone was oval and rounded. Note again that the flat stone, which caused so much pain, is smooth and dark, almost black, while the rounded egg-shaped one from Samuel C. is a typical fawn colour, and covered, like uric acid calculi, with fine granular points. The dark colour is caused by the adherent blood pigment, and indicates the existence of hæmorrhage.

To show, however, how very closely the symptoms of a calculus may be resembled by intermittent dilatation of the pelvis, I will call your attention to the case of a gentleman, Mr. J., æt. 40, who gave the following history: On February 10th, 1903, he had an acute attack of pain in the left loin, preceded by aching in the penis, and also a pain low down in front, just above Poupart's ligament. He passed a small quantity of red sand and one small clot of blood. This attack lasted an hour. Three weeks later he had another attack, relieved by applying heat. He had a third attack in March, 1903. On Easter Saturday the pain came on in an omnibus, and lasted nearly an hour. He records eleven attacks in all during 1903, relieved sometimes by heat, later by morphia pills or hypodermics. In March, 1904, he notices pain over the bladder, and again a little blood. The aching in the

penis accompanied many of the attacks, and micturition was frequent. When the pain had passed off he was at once able to move about, and has played tennis soon after an attack. He passed the red sand on one occasion only. It may be noted that he had lumbago in 1902, and sciatica before that.

This might almost be called a classical record of renal calculus, or at least of gravel. The patient was a gentleman of particularly accurate habits, and his account was of great value. His method of applying heat is worth notice, and is one I myself learnt to employ many years ago for lumbago. A couple of sheets of thick brown paper are laid on the part, and a heated flat iron passed over. The X-rays gave no information.

On March 16th, 1904, the kidney was explored. No calculus could be felt. The cortex was divided and the pelvis and calyses examined. The infundibulum was opened and a catheter passed down to the bladder, but no stone or obstruction could be found. The kidney was sutured with catgut, and then by its capsule fixed to the loin.

You will notice here that blood was passed. The operation on this man gave one naturally a good deal of anxiety, not only because of its great prolongation owing to the attempt to clear up every possibility, but owing to the unsatisfactory result of the search for a stone. I wrote for information as to his present condition, and he replied to say that he was quite well, that he had had no attack since the operation, and that he was able to play golf and tennis without any discomfort.

These four cases, I think, will prove sufficient for the purpose of a few remarks upon the question of diagnosis. The characteristic pain, known as renal colic, can, you see, be due to other conditions than that of stone, and the closest resemblance is produced by dilatation of the pelvis, leading to a swelling which is called a hydronephrosis. When a tumour can be felt the diagnosis is easily made. There was, for example, in Lydia ward a young woman who, with these attacks, had a typical enlargement in the right loin. The kidney was found so much destroyed that nephrectomy was performed, and with success. There is at the present time in Lydia ward a girl of twenty-three who had not only attacks of severe pain in the left loin, but also pain of a continuous character. With some difficulty we could find the swelling in her case. Here again the kidney was removed with complete relief, for in her case the obstruction was low down, the whole ureter being greatly dilated, and this probably explained the continuous pain from which she suffered. It must, however, be mentioned that in some cases where a swelling is found at the operation, there may be no clinical evidence of dilatation of the pelvis. Such was the case of a man who was in the ward last year for severe attacks of right-sided pain, thought by the medical man who sent him in to be due to appendicitis. The pain, however, was too much in the right loin, though the anterior pain was distinctly in the situation of the appendix. The loin factor, however, being so marked, the kidney was explored and found to be enormously enlarged—dilated, in fact, into a cyst. It was removed, and again with complete success.

There are, however, as you will see from the second case and the fourth case, conditions which do not give rise to a perceptible tumour and yet determine attacks typical of renal colic. I think in the second case the cystic condition of the kidney may be placed aside, as I have said before, as an accidental circumstance, and that his case may be associated with that of case four, as illustrating dilatation of the pelvis to a small degree. This condition one has frequently found in exploring kidneys for a suspected calculus, and there are certain symptoms which may enable us in future to be more accurate in the diagnosis. The principal symptom is the localisation of the anterior pain. You will notice in case four that it was felt low down, near Poupart's ligament, on the left side. Now, when it occurs on the right side, the site of pain corresponds almost exactly with that of the appendix. And here the diagnosis is rendered very much more difficult. From a group of several cases, all very similar in character, I will extract one, partly because it shows an error in diagnosis. It was that of a girl who was in Lydia ward in December, 1904. For years she had been subject to "pain in the back" at intervals of two to three years. Dr. Wright, when called, found pain in the right loin, and a raised temperature. Sometimes she was brought home in these attacks from her business and was very sick. At first the pain was relieved by lying down with the corsets on. For the last nine months the attacks have become more severe, and more frequent. The pain, beginning in the back, passes forwards over the region of the appendix, then vomiting ensues, and will occur as often as eight times in twenty-four hours. The next day, she will be able to go to her business as usual. On examination, the cause of the attacks lay either in the kidney or the appendix. Torsion of an

ovarian pedicle does not give pain in the loin without the presence of a tumour in this position—a condition I have once seen. The kidney could just be felt, and was not more movable for a right-sided organ than is commonly seen in women rather spare in build and hard working. The cæcum could be felt somewhat easily, and was perhaps more tender than usual. The urine gave no assistance in the diagnosis. There never had been any blood, and there was no increased frequency of micturition. As the attacks had become almost of weekly recurrence, it was decided to operate, and the question arose as to whether the appendix or the kidney should be attacked.

In women the dependence of pain on the menstrual period adds one other difficulty in diagnosis. In this patient the onset not infrequently coincided with that of the period, but no definite association could be traced.

At this period of my work, it seemed best in my judgment to examine the appendix first, and the ovary and ureter and kidney after. Danger to life came alone from the appendix. I had not formulated clearly to myself the important points in diagnosis of renal colic of this type.

On January 1st, 1905, I operated, and found the appendix kinked and dilated—sufficient cause, I thought, for all the pain. In July, 1905, six months after operation, I made the following note. She had been much better till June 25th, when one of the old attacks occurred. The pain began gradually, increased towards night, but was, on this occasion, not followed by sickness. The pain was localised to the loin, 3½ inches to the right of the median line and 1½ above the iliac crest. It was relieved by pressure—*e.g.*, she gets the edge of a chair well into the loin and draws her legs up. There was no pain down the ureter, no blood in the urine. She recovered the same night, and went to her business next day.

January 23rd, 1906. Dr. Holland Wright reports that there has been no attack since June. She still has pain in the loin, relieved by "digging in the fist," but is free from sickness and great pain. A radiograph gave no information. She has gained in weight, and is in good health.

Probably this is a case where two causes existed, for definite relief followed removal of the appendix. The recurrence of a typical attack six months later, however, proves that the chief factor remained. The recovery from the severe attacks may indicate that some change has led to a correction of the position of the ureter, to diminution in the mobility of the kidney, or that a calculus may have become fixed in a pocket.

To further illustrate the peculiar fixity of this pain I will mention also one other instance; it is that of a patient who happens at the moment to be in Lydia ward. Acting upon the knowledge derived from several of these cases—cases where the patients have placed the finger on the spot of pain, between the anterior superior spine and the umbilicus, a pain that seems to be too frequent for appendicular colic—I was able to correctly diagnose the renal origin of this pain. The notes of the case are as follows, and I see were made for me by Mr. H. J. Clarke. Jessie W., æt. 20, was admitted into Lydia ward in March, 1904, with pain in the right iliac region. In May, 1903, she was successfully operated upon for a perforated gastric ulcer at Charing Cross Hospital. She stated that on December 11th, 1903, she had sudden pain, which doubled her up and caused vomiting. It was in the right side of the back, and went down to the knee, and was unaccompanied, as far as she knew, by fever. Since then she had had several attacks of pain. On admission, when asked to indicate the situation, she placed her finger on a spot midway between the anterior superior spine and umbilicus—practically in the region of the appendix—and on pressure here she complained of tenderness. During a paroxysm of pain, it was chiefly felt in this position, but also, to some extent, in the loin. The kidney could distinctly be felt, but there was no enlargement. The diagnosis lay between appendicular colic and renal colic. Looking to the exact situation of the pain, to its more or less constant existence, to the frequency of the attacks, and comparing it with the other cases, the renal origin seemed to be the more consistent view. On March 21st the kidney was exposed, was found to be movable, and the pelvis somewhat dilated, but no stricture of the ureter could be found, and no stone in the pelvis. The capsule was detached and the kidney fixed. Immediate improvement followed this operation. Not much confidence was, however, placed in this result, as one recognises only too fully how frequently pains of various kinds disappear for a time after operation. The patient was kept under observation, and came up from time to time complaining of pain, not in front as before, but in the back at the median end of the scar. For this she was readmitted on December 12th, 1905. The pain was distinctly of a different character. It was felt in the back, passed up beneath the right shoulder blade, was of a dragging character, and interfered with her work. She had not had any of the old attacks of pain, and there was no pain or tenderness in front. The right kidney

could be distinctly felt, and on deep inspiration the hand could reach its upper border. The only cause one can assign for this pain was, that the end of the last dorsal nerve might have been included in the scar. Opposed to this was the fact that there was no pain over the distribution of this nerve. It must be noted that the girl was anæmic, and showed all the characters of the gastric ulcer patient, so that much of her pain might have been neurotic. It was, however, thought well to open up the scar, and this was done on January 15th, 1906. The end of the nerve was found and cut away, and it remains to be seen how much improvement will result. I may say that since the second operation upon the nerve she has left the hospital apparently free from pain.

So far as one can go at present the diagnosis of these cases of intermittent hydronephrosis without tumour, causing renal colic, depends upon (1) the frequency of the attack; (2) the peculiar localisation of the pain in front; (3) the absence of evidence of stone by X-rays; (4) the general absence of hæmaturia; and (5) I think also it may be said that the attacks are not so severe as those in the marked cases of renal calculus.

You will notice the difficulty that always must arise when this pain is on the right side, and a good many of these patients have had the appendix removed without any relief. Amongst my notes I have the case of a lady who was none the better for this operation, and who was relieved for a long time, and I hope ultimately will be permanently relieved, by suture of the kidney. It may be said that the kidney in all these cases will be found to be unduly movable. Though this mobility did exist very markedly in the last case referred to, that of Jessie W., it could not be found clinically in any of the others.

The next point I would refer to is the value of X-rays in the diagnosis. In case 1, we derived no benefit, although the stone was a large one. I have here a calculus, rather larger in size, but of the same constituents, removed from a man who had already had the appendix removed for pain. The X-rays gave no information, nor had he the marked attacks of pain occurring with renal calculus. So well was he on the day of operation, that he suggested that it might be postponed. And here is another calculus from a lady; in this case, a phosphatic calculus half an inch in diameter, the X-rays gave us no information.

With regard to hæmaturia, you will note that it was absent in the first case, and it was also absent in the other patient I have referred to with a similar stone. You can tell by the appearance of these calculi whether there has been hæmorrhage or not, and these two calculi show the ordinary fawn colour of uric acid, whereas the calculus removed from the man, æt. 62 is, you see, triangular in shape and of a very dark brown colour, due to blood pigment. As to the frequency of this symptom, Mr. Henry Morris states that it occurred in 44 out of 103 cases. Let me, however, call your attention to the fact, that while there may be no visible blood in the urine, it may be found in microscopic quantities, and that when occurring daily over a considerable time, together with a perceptible amount of albumen, it affords very strong evidence of the presence of a calculus. In one instance in which I was asked to operate, this evidence was used to determine operation, and a calculus over half an inch in diameter was found. It therefore is necessary to make careful examinations of the urine, not merely to examine by the naked eye or by the usual chemical tests, and more than that, the examinations should be frequently repeated.

I would like to refer also to two children who were in the ward with attacks of renal colic. One was a boy of 11, who was sent in with this diagnosis, but looking to his age, to his sex, and to the fact that some of the pain was in front, I thought it better to explore the abdomen, examining not only the kidney, but also the appendix and the gall-bladder. Having done this, and finding that the appendix had a sharp kink near its termination, it was removed. No improvement followed, and the kidney was later explored and an artery found crossing the front of the infundibulum. It was surrounded by firm connective tissue, and was the only explanation that could be offered, for the dilatation of the pelvis, which was found of considerable extent. The kidney was fixed in April, 1905, and a report, received a few days ago, states that the boy is quite well.

A very similar case was that of a girl of ten, who was in Lydia, and who had a typical attack of renal colic, but here a tumour of small size could be felt. On exposing the kidney, considerable dilatation of the pelvis was found, and here an artery, passing in this case behind the infundibulum, was found and divided. A report upon this case received a few days ago states that the child is quite well, has had no further attacks, and that the urine has cleared up.

Probably both these vessels, associated with some undue mobility of the kidney, determined kinking of the ureter and dilatation. On the subject of aberrant arteries I would refer you to

some illustrations published by Dr. Newton Pitt in the Pathological Society's Transactions for 1894.

In conclusion, my object has been, first, to illustrate the typical symptoms of renal calculus; next to show you that some of the classical symptoms may be absent—hæmaturia, for example; next, to point out the advantage to be gained by the X-rays, and to show you calculi of considerable size that have not thrown any shadow. I need hardly say that Mr. Shenton is looked upon in London as one of the most successful finders of these calculi. Next to point out to you the importance of examining for the constant presence of small quantities of blood—quantities only to be found by the microscope; and next I especially call your attention to the peculiar fixity of the pain in some of these cases, at a point midway between the anterior superior spine and the umbilicus—a pain which the patient indicates by the point of the finger, and says that this covers the area over which the pain is felt; and that when it occurs on the right side, to note the special difficulty in distinguishing it from pain due to some morbid condition of the appendix; and finally, to point out that my observations tend to show that this particular kind of pain is of renal origin and is associated, not so much with renal calculus, as with intermittent hydronephrosis, but not sufficient to give rise to a tumour.

Notes from Paris.

The Pasteur Institute.

When I first came to Paris I was happy to find an old friend in the widow of the late Dr. Duclaux, who succeeded Pasteur as director of the famous establishment in the Rue Dutot. This talented lady, who takes a keen interest in the work which was so successfully carried on by her late husband, kindly gave me an introduction to Dr. Besredka, a Russian scientist, who is the assistant of Dr. Metchnikoff, and a co-editor of the Pasteur Institute Reports.

The approach to the Institute is not very inviting, but the main building itself is rather an imposing structure of brick and stone. Opposite, on the other side of the street, is the new Chemical Institute, and behind this is the special hospital for the study of infectious diseases. A bronze statue of a man struggling with a mad dog faces the principal entrance. The man represented is in reality the porter of the Institution, and Dr. Duclaux used to say that he was the only porter in Paris, living or dead, who had had his statue erected!

The sound of dogs barking is the first thing that strikes the visitor. It is the "matériel" of the physiological laboratory vociferating a welcome from the kennels at the rear. Directed by the porter, on the occasion of my first visit, I went round to the back of the building, passing at the side another large block, which connects the front portion of the Institute with a similar block at the back. Actually the whole building is in the shape of the letter H. At one end of the rear block I saw the large waiting-room for patients who have been bitten by rabid animals. It is a fine lofty room furnished with benches. On the walls are maps showing geographically the Pasteur Institutes of the world. England, alas! is not represented. Here, every day at ten o'clock in the morning, persons attend to receive their injections in the room beyond. About 1,500 patients are treated annually, each attending daily for about three weeks. I found Dr. Besredka in his laboratory. Of medium height, thin, erect; a pale face with dark Russian eyes behind pince-nez; a tiny black moustache not concealing the rather large mouth with well-defined teeth; below, a "mouche"; the spare figure clad in white calico—such was Besredka. He received me most courteously, and at once gave up the afternoon to me. Like most of his countrymen who travel afield, he spoke English fluently, and he showed me all over the Institute. What struck me particularly was the amount of space everywhere. Great corridors, large rooms, passages, wide staircases. Even in the laboratories there was no crowding of apparatus. All was order. The fact is, the Institute could accommodate a vast army of scientific workers, who apparently are yet to come. In the physiological laboratory there was nothing being done at the moment, but I was introduced to Dr. Delesenne, and we spoke of two old Guy's men—the late Dr. Woolridge and Professor Starling. The latter's name met with cordial recognition. We next visited the fine lecture theatre, where the late Dr. Duclaux used to meet his pupils of the Sorbonne. In the library are fine busts of Pasteur, and of several benefactors of the Institute. From there we paid a visit to the chapel in the crypt, containing the tomb of Louis Pasteur. It is a beautiful place, and in the middle, facing the white marble altar, is the black granite block beneath which rest the mortal remains of the great savant. Around on the walls are mosaic representations symbolising the principal works of Pasteur. Above, and to one side of the crypt, are the private apartments of Madame Pasteur, who still lives in the Institute. Next we visited the laboratory of Dr. Metchnikoff. Entering a large room, attention was at once arrested by a large number of cages containing monkeys of all sizes and species. These creatures kept up a perpetual chatter, and certainly seemed in very good health. Leading out of this was another large room, which was divided into three parts by partitions, for the accommodation of the chimpanzees and orang-outangs. My guide led the way past the cages, and we entered the middle portion of the further room. With his back to the window, standing behind a wooden table, was the famous Russian, Metchnikoff. He had the conventional aspect of the continental savant of the German type. A large, massive head, long grey hair

and beard, a slight stoop of the shoulders, kindly blue eyes looking through steel-rimmed spectacles, and the smile of a child. He wore a loose-fitting grey suit, the coat faded to a lighter tint. A tiny black tie, like an unsuccessful rosette, held together a limp collar, while against the wall stood a pair of gigantic goloshes, into which his large boots dived later on when he went out. After an introduction by Dr. Besredka, we exchanged a few remarks in German, when I again referred to Professor Starling, who had worked there, and whom Dr. Metchnikoff said he knew. As he stood talking, with a large hyperdermic syringe in his rubber-cased hands, I could not help thinking how simple and unaffected he was. He possessed, in truth, the simplicity and entire freedom from "pose" of the truly great workers of the world. I remained long enough in the laboratory to see several interesting experiments with the anti-syphilitic serum of which so much was hoped. Now, after three years' trial, no satisfactory results have been obtained. I spent the rest of the afternoon with Dr. Besredka, chatting about vivisection, English institutions, breach of promise of marriage, serums, customs and habits of the upper classes in England and France, filters and the plague, until the light faded, and I took my leave.

During my subsequent visits I saw the hospital, with its glass-partitioned cubicles. I heard that scarlatina is a very mild disease in France, and thought very lightly of. I also heard that Behring's new tuberculin had been a failure in all the cases in which it had been tried at the Institute. Finally, I was given particulars of the latest discovery in regard to the prevention of syphilis. From numerous experiments upon monkeys and one man (a doctor), it has been proved that if an ointment composed of one part of calomel and two parts of lanoline be rubbed into the site of supposed inoculation, within a certain time after exposure to contagion, the "spirochites" are destroyed. In the monkey experiments the time allowed to elapse between inoculation and calomel treatment was *eighteen hours*. In the case of the heroic student of medicine, however, the time allowed was *one hour*. In every case the "control" developed the disease. There were no failures, and the efficacy of the prophylactic treatment was considered as established. One cannot but think that the importance of this discovery by Metchnikoff and Roux is likely to be very great.

FREDERIC VICARS, M.D.

May 15th, 1906.

From the Gazette's Special Pathologist.

NOTICES.

J. S., Harlesden.—This specimen is not quite satisfactory, as it arrived quite dry with a broken bottle. As far as can be made out, it is a fibrous epulis, the epithelium on the surface being a little thickened, but showing no malignant tendency. PATHOLOGIST.

The Prognostic Significance of Purpura in Children.

Paper read before the Physical Society by G. H. K. Macalister.

(Continued from the last issue.)

The types met with between the ages of five and fifteen differ from those just considered. On the whole the immediate prognosis is better: out of sixty-seven cases, only eleven proved fatal. On the other hand, it must be remembered that certain forms of purpura peculiar to this epoch bring with them permanent pathological changes, of which the ultimate effect is a curtailment of life.

In the toxæmic class, the three principal types between these ages are primary purpura, rheumatic purpura, and Henoch's purpura. The joint pre-eminence of these forms is very striking, fifty-seven out of a total of sixty-seven cases belonging to one or other of them. It is not always easy definitely to assign a case to its proper position; an investigation of a large number of these cases shows that many of them are intermediate forms. This difficulty is even more accentuated by text-book descriptions. It is enunciated that abdominal pain and vomiting are constantly present in Henoch's purpura and occasionally in simple purpura; that joint pains are an essential part of rheumatic purpura, but frequently occur also in primary purpura or Henoch's purpura. A provisional type called indeterminate purpura would be a *godsend in our present condition of ignorance.*

Of primary purpura, there are in this series nineteen examples. Four of the more severe cases have been duly christened hæmorrhagica. The duration of illness in these cases varied, as a rule, from ten days to five weeks. One case lasted for four months. Relapses occurred in two cases. In thirteen, the rash was universal, in the remaining six, it was more localised. Ecchymoses were sometimes found in peculiar situations, such as conjunctiva, soft palate, or buccal mucous membrane. Fatal cases are rare.

A boy of fourteen was under Dr. Pye-Smith in 1884 with a univeral purpuric eruption. The petechiæ, at first pinpoints, became ecchymoses, and, later, bullæ. Hæmorrhages occurred from all mucous membranes. Death followed ten days' illness. The proneness to bleed was very evident towards the end. On the day before death a fly settled on his face, and, though brushed away at once, left a bleeding mark. After death micrococci were cultivated from venous thrombi. This is said to be the first case of purpura in which the blood was examined bacteriologically.

A rare and invariably fatal variety of purpura is accompanied with gangrene. This gangrene affects most commonly the mucous membrane of the mouth. Osler has described two cases of gangrene of the uvula. Holt mentions a case in which perforation of the soft palate resulted. Sloughing of the skin is less common. There is a case described by Dr. Pye-Smith of a girl aged nine

in whom an intense purpuric rash was accompanied with sloughing of the labia. Death occurred after five days' illness.

Purpura rheumatica is the name given to a condition in which a limited purpura is associated with joint pains. The rash is usually restricted to the neighbourhood of the knee-joint. Dermatologists describe it as a hæmorrhagic form of erythema exudativum. It may start as a collection of minute petechiæ, but these soon become confluent, forming large, irregular, palpable ecchymoses. In sixteen cases out of twenty-one, the manifestation was confined to the legs. In other cases there was at the same time a rash on the arms. The association with rheumatism is a very definite one. A definite rheumatic history was obtained in nine cases. In another, there was a history of chorea. In four cases a sore throat preceded the illness.

Few cases of purpura rheumatica die. Death, in such cases, is practically always due to the associated heart lesion. The only fatal case in the present series was that of a girl of twelve who was under Dr. Bryant's care in 1903. She had been in the hospital on a previous occasion with an attack of acute rheumatism. On admission, a dense hæmorrhagic erythema surrounded the knee-joint. The knees and ankles were swollen and painful. The heart was irregular; systolic and mid-diastolic murmurs were heard. A week later pericarditis supervened and the patient died three weeks after admission.

Most cases of rheumatic purpura are ushered in with mild fever. After a few days this subsides. In some cases, possibly with a rheumatic history and probably with signs of valvular disease, wide-spread purpura is accompanied with rigors and irregular pyrexia. In other words, purpura ofter occurs in infective endocarditis. Such cases belong properly to the embolic group, but, if not consistent, it is convenient to deal with them here. Infective endocarditis is relatively not a common disease in the young. Out of fifty-four cases collected by Dr. Taylor, nine were below the age of fifteen. Most often, they followed rheumatism or chorea, but in one or two instances were preceded by pneumonia or suppurative meningitis.

The prognosis is almost absolutely bad.

The first case in the present series was that of a girl six years old, who was under Dr. Pitt's care in Clinical in 1901. The history was as follows:—On November 11th, the patient complained of pain in the thigh. In the evening, purpuric spots appeared on the legs. On the 12th, she complained of pain in the abdomen and vomited repeatedly. On the 13th, she passed a large amount of blood by the rectum. She was sent up to the hospital as an intussusception. On the 15th, purpura was universal. The temperature varied from 99° to 103°. An examination of the heart revealed nothing abnormal. On December 3rd, the pulse was rapid and weak. On the 8th, fresh crops of spots appeared; there were signs of pneumonia on the right side. On the 6th, the left lung became involved. Death took place on the 10th. A post-mortem examination was made, and there were found extensive consolidation of both lungs, vegetations upon the mitral valves and general septic meningitis.

The second case, a girl of fifteen, was admitted into Clinical under Dr. Fawcett in 1903. She remained in the hospital for four months, running an irregular temperature. A purpuric rash started on the elbow and spread rapidly all over. Later, hemiplegia, strabismus and aphasia made their appearance. At the autopsy were found endocarditis, with stenosed mitral valves and ruptured chordæ tendineæ; infarcts in liver, spleen and lung; abscess of the spleen; ulceration of the colon; embolism and aneurysm of the middle cerebral artery. From the blood during life a streptococcus was cultivated.

The third was a boy of thirteen, who was under Dr. Pitt in 1901. There was no history of rheumatism. The illness started three days before admission. Soon after arrival an extensive purpura appeared, and death ensued five hours later. The autopsy revealed the presence of infective endocarditis with an infarct in the kidney.

The immediate prognosis in purpura rheumatica has already been considered. What of the ultimate prognosis? An attack of purpura rheumatica is really subacute rheumatism complicated with a peculiar skin manifestation. The poison is probably identical. The same heart murmurs accompany the disease. Relapses are common. A typical acute rheumatism may occur at any time. So that, as far as ultimate prognosis is concerned, the position is the same as in rheumatic fever. The first may leave behind nothing more than a tendency to relapse. The second always leaves some organic change. And a third attack seldom fails to cripple the heart.

The next type is one that has suffered much at the hands of enthusiastic diagnosticians. Bnt from other purpuras it has an individuality distinct. Severe abdominal pain, widely distributed purpura, vomiting, melæna and occasional rheumatoid pains; all these symptoms combined afford a clinical picture of Henoch's purpura. The abdominal pain may be so great that a laparotomy is performed.

The present series contains fifteen cases diagnosed as Henoch's purpura. Of these, four might be assigned to the indeterminate class. Most of the cases occurred in children between the ages of six and fourteen. None of them were fatal. Henoch reports two deaths in eight cases, and Osler out of eleven cases lost three. So that the immediate prognosis is favourable.

A boy came into Clinical ward, under Dr. Hale White, in 1903. He had been suffering from sickness and abdominal pain for a fortnight. On admission, purpura and hæmatemesis were present. The abdominal pain was very severe. Blood was being passed by the rectum. The rash was on the legs, arms and abdomen. The urine contained albumin and blood. After three weeks' sojourn in the hospital, the hæmorrhagic symptoms subsided, and the patient went out relieved. But the albuminuria persisted.

There is in Henoch's purpura a marked tendency to relapse. In five of these cases relapses were reported;

repeated relapses in three. One patient visited three hospitals in fifteen months.

Another fact that stands out very strikingly is that, while almost all the symptoms subside after a short stay in hospital, the albuminuria always persists. This was the case in all but one of this series. In almost all fatal cases, nephritis has been found.

On this account the disease should probably be classed as toxæmic, although Henoch himself attributed it to some vasomotor disturbance. It is by no means always easy to say how nephritis with purpura differs from purpura with nephritis. Everyone is familiar with the tendency of patients with Bright's disease to "bleed from anywhere." And further, the abdominal pain which is so prominent in Henoch's purpura is almost certainly due to hæmorrhage into the intestinal wall.

If, then, in a case of Bright's disease there are albumin and casts in the urine, with accentuation of the hæmorrhagic and gastro-intestinal symptoms, the case becomes one of Henoch's purpura. So that Henoch's purpura may really be considered as a variety of Bright's disease, and, therefore, the ultimate prognosis is usually unfavourable.

The following case has features of interest:—

A girl of 10 was admitted into the South-Eastern Fever Hospital on October 8th, 1900, on the fourth day of an attack of faucial diphtheria. Antitoxin was promptly injected. On October 11th, hæmatemesis and melæna appeared, and a petechial rash was found on the buttocks. On the 12th she was very ill. The temperature was 101°, the pulse rapid and feeble. There was a purpuric rash all over, especially well marked on the knees and elbows, behind the ears, and over the malar bones. There was albumin in the urine. On the 15th, a post-antitoxic urticaria came out. The patient complained of pains in her joints. On October 24th, fresh petechiæ appeared; there was great cardiac weakness. After this, the patient began very slowly to improve, the petechial eruption very slowly subsided, and she was discharged cured on the 1st January, 1901.

Dr. Buckley, who published this case, conjectured that the purpura was due to a post-diphtheritic vasomotor paralysis. Another explanation would attribute all post-diphtheritic palsies, purpuras and nephritis to the toxæmia.

There are now only a few rare forms of purpura left to mention. To illustrate these, three of the Guy's cases will be briefly described.

The first was a boy of six, who was under Dr. Pitt in 1899. The diagnosis was "acute gastro-enteritis: ?malignant scarlatina." On the day before admission, he had diarrhœa and vomiting and a sore throat. Soon after admission he developed a rash on his chest and abdomen, which spread rapidly on to his limbs, and finally on to his neck and face. His temperature rose to 103°. He became delirious and died. At the autopsy nothing was found.

A boy aged five was admitted into John ward under Dr. Fawcett in 1904. Ten days before admission, lumps were noticed on his neck. He was admitted on July 9th. Red spots appeared on his flanks. By the next day these had extended on to his chest and limbs, back and face. The size of the spots varied greatly. The largest were ¼ of an inch in diameter. These big spots were distinctly palpable. On July 11th, the temperature rose to 103°. Copious hæmatemesis occurred in two or three paroxysms; the amount of blood lost in this way was two pints. Soon after this he sank and died. At the autopsy, the liver was found to be enlarged and generalised lymphosarcoma was present. The conclusion was that minute emboli, consisting of new growth, caused the cutaneous eruption.

The last case was a boy of six, who was under Dr. Pitt's care in 1905. His illness started on May 5th with slight vomiting and epistaxis. A peculiar change then took place in his disposition. He became sullen and stupid. On admission, a fortnight later, he was distinctly anæmic. The liver and spleen were felt to be enlarged. The salivary glands were increased in size, and large glands were felt in the axillæ and groins. There was a rash on his trunk and limbs. His gums were bleeding. A blood-count done soon after admission showed that the number of red and white cells were 1,750,000 and 301,250 respectively. Of the white cells, 96 per cent. were small lymphocytes. Epistaxis and hæmatemesis occurred from time to time. There was irregular pyrexia. He died on July 21st, and at the post-mortem, petechiæ were found in all organs. The lymphatic glands and the thymus were large. The stomach was full of blood, and a blood-clot was found in the œsophagus. The spleen weighed 800 grammes. The bone-marrow was pinkish.

The consideration of the whole collection of cases teaches that in purpura, death, when it occurs, is due, not *to the purpura, but to the associated conditions.* In toxæmic cases, it is due to the toxæmia, in cachectic cases to the cachexia, and in embolic cases, to the emboli—be they sarcomatous, tuberculous, or infective. Thus purpura is not a cause of death, but an effect of the ultimate cause of death. And it may at times draw attention to the presence of such a cause.

The mortality is most severe in the newly-born, and becomes lighter as age advances. In the first year the mortality is 72 per cent. In children under five, the mortality is 60 per cent. It falls to 22·6 per cent. during the next period of five years, and between ten and fifteen is not more than 13·5 per cent.

Some time has also been devoted to the question of ultimate prognosis in connection with Henoch's purpura and rheumatic purpura. Some cases of primary purpura are apt to relapse. A few cases have been assigned to a limbo for indeterminate forms. The prognosis in none of these is altogether favourable. Purpura with vague pains in the joints or abdomen should always be viewed with suspicion. In any one of them a recrudescence of the disorder may bring about permanent injury of heart or kidneys, with consequent shortening of life.

It has been objected that it is unnecessary to distinguish cachectic and embolic groups; that all purpuras are toxæmic. The classification that has been used is merely provisional. Finally, if this paper has brought no new facts to view, if it has brought no new light into the difficult province traversed, and swept no rocks from the path, it has at least emphasised the need for more light, the necessity for fresh untiring labour in clinical, pathological and bacteriological research.

I.—CASES FROM THE EAST LONDON HOSPITAL REPORTS, 1897–1905.

No.	Physician.	Year.	Sex and Age.	Index No.	Diagnosis.	Remarks.	Post-mortem Examination.	Duration.	Result.
1	Dr. Morley Fletcher	1904	M $\frac{4}{12}$	429	Purpura. Large liver and spleen	Retinal hæmorrhage. Blood in ant. and post. chambers	— — ...	8 months	Cured.
2	Dr. Coutts	1901	M $\frac{4}{12}$	209	Gastro-enteritis	Universal purpura	Hæmorrhagic suprarenals. Saprophyte in heart's blood	1 day	Death.
3	Dr. Eustace Smith ..	1901	F $\frac{4}{12}$	1195	Broncho-pneumonia ...	Purpura on trunk on last day of illness	Large spleen	5 weeks	Death.
4	Dr. Eustace Smith ..	1898	M $\frac{6}{12}$	77	Wasting	Purpura on neck, axillæ, abdomen, thighs, last 4 days	— — ...	2 months	Death.
5	Dr. Coutts	1901	F $\frac{7}{12}$	502	Broncho-pneumonia ...	Purpura on arm and ear on last day of illness	Hæmorrhagic suprarenals ..	1 month	Death.
6	Dr. Eustace Smith ..	1898	M $\frac{9}{12}$	101	Chronic D. & V. Œdema	Purpura on abdomen on last day of illness	— — ...	1 month	Death.
7	Dr. Eustace Smith ..	1904	F $\frac{10}{12}$	1283	D. & V.	Universal purpura	— — ...	6 weeks	Cured.
8	Dr. Coutts	1901	F 1	528	Vomiting	Universal purpura	Subperitoneal hæmorrhages. Hæmorrhagic suprarenals	1 day	Death.
9	Dr. Eustace Smith ..	1900	M 1	458	Purpura	On face, chest and arms ...	Hæmorrhagic suprarenals. Blood sterile	1 day	Death.
10	Dr. Eustace Smith ..	1897	F $\frac{13}{12}$	71	Eczema. Cutaneous tubercle. Purpura	— — ...	— — ...	5 weeks	Cured.
11	Dr. Coutts	1901	F $\frac{14}{12}$	890	D. & V.	Universal purpura (last 3 days)	— — ...	1 week	Death.
12	Dr. Eustace Smith ..	1897	F $2\frac{8}{12}$	64	Purpura	On chest, shoulders, neck, arm, abdomen	Hæmorrhages in heart-muscle Subserous hæmorrhages	3 days	Death.
13	Dr. Eustace Smith ..	1901	F 3	941	Purpura	On legs, trunk, neck. Vomiting	— — ...	2 weeks	Cured.
14	Dr. Eustace Smith ..	1902	F $2\frac{8}{12}$	—	Purpura	Cervical abscess opened, drained. Pains in head. Apathetic Screaming fits. Cyanosis. Coma. T. 103	Hæmorrhagic left suprarenal. Hæmorrhages in cortex of left kidney. Thrombosis in sup. long sinus, sup. and mid. cerebral veins. Pin-point hæmorrhages in grey matter of cerebellum. Thymic abscess	11 days	Death.
15	Dr. Coutts	1899	F $4\frac{1}{2}$	483	Purpura hæmorrhagica ..	Hæmaturia. Melæna ...	— — ...	10 months	Cured.
16	Dr. Donkin	1897	M $3\frac{1}{2}$	31	Purpura hæmorrhagica ..	Œdema. Hæmatemesis. Hæmaturia. R.C. 720,000. H.C. 15 % on day before death	— — ...	14 days	Death.
17	Dr. Dawson Williams	1901	F 5	1033	? Henoch ? Purpura rheumatica.	Purpura on legs and buttock. Pain in ankles and knees	— — ...	14 days	Cured.
18	...	1906	M 3	—	Diphtheria (laryngeal, facial, nasal)	Purpura last two days. B.I.D.	*v.* Diagnosis. Sloughing of tonsils	5 days	Death.
19	Dr. Eustace Smith ..	1901	F 5	1063	Purpura	Hæmaturia. R. C. 6,560,000 W. C. 12,400	— — ...	5 weeks	Cured.
20	Dr. Coutts	1901	M 5	719	Purpura	Universal	— — ...	14 days	Cured.
21	Dr. Coutts	1903	F 5	423	Purpura. Bronchitis ...	Universal Purpura	— — ...	4 weeks	Cured.

TABLE I.—*continued.*

No.	Physician.	Year.	Sex and Age.	Index No.	Diagnosis.	Remarks.	Post-mortem Examination.	Duration.	Result.
22	Dr. Coutts	1904	M 6	427	Purpura rheumatica ...	Purpura on elbows and thighs	— — ...	6 weeks	Cured.
23	Dr. Coutts	1898	F 6	42	P. hæmorrhagica. ? Hæmophilia	Purpura universal. Epistaxis	— — ...	1 week	Cured.
24	Dr. Eustace Smith..	1897	F 6	64	Purpura. Morbus cordis	Purpura universal. Hæmaturia. Epistaxis. Hæmatemesis. Hæmorrhage from rectum	— — ...	1 month	Cured.
25	Dr. Eustace Smith..	1903	M 9	1036	Purpura rheumatica ...	Purpura on legs and arms ...	— — ...	5 weeks	Cured.
26	Dr. Eustace Smith..	1902	M 9	1453	Purpura rheumatica ...	Mitral stenosis and regurgitation	— — ...	3 weeks	Cured.
27	Dr. Donkin	1898	M 9	—	Purpura rheumatica ? ...	Universal. (Salicylates and arsenic)	— — ...	5 weeks	Cured.
28	Dr. Donkin	1897	F 10	30	Purpura	Universal	— — ...	10 days	Cured.
29	Dr. Eustace Smith..	1899	F 10	270	Purpura	On legs, arms, abdomen. Pains in joints	— — ...	4 months	Cured.
30	Dr. Eustace Smith..	1902	F 11	1081	Purpura rheumatica ..	Mitral stenosis and regurgitation. Strong rheumatic history	— — ...	3 weeks	Cured.
31	Dr. Morley Fletcher	1904	M 12	1158	Henoch's purpura . .	Abdominal pain. Hæmatemesis. Melæna	— — ...	5 weeks	Cured.
32	Dr. Eustace Smith..	1901	F 13	729	Purpura	Universal	— — ...	10 days	Cured.
33	Mr. Robinson ...	1906	M 9	—	Tub. knee. Excision. Septicæmia	Purpura on face and neck appeared an hour before death	— — ...	2 days	Death.
34	...	1906	—	—	Acute nephritis. Purpura	— — ...	— — ...	3 weeks	Cured.

II.—CASES FROM GUY'S MEDICAL REPORTS, 1894–1905.

Cl. = CLINICAL. I.W. = ISOLATION WARD.

1	Dr. Pitt	1905	M $\frac{4}{365}$	97	P. Neonatorum with jaundice	History of syphilis? Dysphagia. Melæna. Nystagmus	Acute colitis	4 days	Death.
2	Dr. Taylor	1894	F $\frac{3}{52}$	251	P. Epistaxis. Atelectasis	? Syphilitic history	Atelectatic patches in both lungs	10 days	Death.
3	Dr. Bryant	1899	F $2\frac{1}{12}$	443	P. simplex	Bleeding from nose & mouth	— — ...	3 weeks	Cured.
4	Dr. Pitt	1904	M 3	327	P. simplex. Epistaxis ...	Ecchymoses on fauces. Relapse	— — ...	10 days	Cured.
5	Dr. Pitt	1896	M 2	391	P. hæmorrhagica ...	Ecchymoses on eyelid and soft palate. Relapse	— — . .	3 weeks	Relieved.
6	Sir Cooper Perry (Cl.)	1904	M 3	189	P. fulminans Epistaxis. T. 99°	Hæmatemesis. Melæna ..	Blood in lungs and intestines	14 hours	Death.
7	Dr. Hale White ...	1904	M 3	380	? Henoch. Blood p. r.	No hæmaturia. Spots few. Purpura persisted	— — ...	3 weeks	Relieved.

TABLE II .—*continued.*

No.	Physician.	Year.	Sex and Age.	Index No.	Diagnosis.	Remarks.	Post-mortem Examination.	Duration.	Resu't.
8	Sir Cooper Perry ...	1905	F $\frac{8}{12}$	359	Purpura. Broncho-pneumonia	Pigmented skin	Ulceration of colon. Œdema of larynx. Hæmothorax. Thrombosed mesenteric vein. Enlarged mesenteric glands	2 days	Death.
9	Dr. Taylor (Cl.) ...	1903	F $\frac{9}{12}$	147A	Purpura. Scurvy. Rickets. Œdema	Has always had Nestle's milk	— — ...	8 weeks	Cured.
10	Dr. Pitt	1905	M $\frac{13}{12}$	441	Nasal Dip. Purpura.	Vomiting. Melæna	— — ...	5 days	Cured.
11	Dr. Hale White (I.W.)	1903	F $2\frac{5}{12}$	659	Hæmorrhagic diphtheria. Sepsis with purpura. T. 104°	Hæmaturia. Œdema. Otorrhœa. Melæna. Rhinitis. Vomiting. S. albus in blood	Streptococcus longus in blood	10 days	Death.
12	Dr. Shaw (I.W.) ...	1902	F $4\frac{3}{12}$	407	Measles with diphtheria. Purpura	Broncho-pneumonia	Broncho-pneumonia ...	6 days	Death.
13	Dr. Shaw (I.W.) ...	1904	M $1\frac{9}{12}$	599	Phosphorus poisoning. D. & V.	Had been sucking match-heads	Enlarged and fatty liver ...	14 days	Death.
14	Sir Cooper Perry ...	1904	M 4	282	Purpura hyperpyrexia. T. 108°	Broncho-pneumonia	Follicular colitis. Petechiæ in lungs. Hæmorrhagic L. suprarenals	8 days	Death.
15	Dr. Hale White ...	1904	F $\frac{9}{12}$	379	D. & V. Marasmus. Rickets	Purpura on abdomen	— — ...	2 weeks	Cured.
16	Dr. Pitt	1905	M $1\frac{1}{2}$	392	D. & V. Purpura. Broncho-pneumonia	Extreme cyanosis	— — ...	5 days	Death.
17	Dr. Taylor (Cl.) ...	1902	M 1	153	Broncho-pneumonia. Empyema	— — ...	v. Diagnosis	6 days	Death.
18	Dr. Hale White ...	1896	M $\frac{8}{12}$	193	Marasmus. Purpura ...	Extends on to scalp	— —	4 days	Death.
19	Sir Cooper Perry (Cl.)	1894	M $\frac{16}{12}$	402	Marasmus. Slight purpura	— — ...	- — ...	4 days	Death.
20	Dr. Fawcett (Cl.) ...	1900	F $\frac{14}{12}$	343	D. & V. Marasmus. Broncho-pneumonia	Cervical abscess	Ulcerative colitis. Broncho-pneumonia	5 weeks	Death.
21	Sir Cooper Perry ...	1900	F $2\frac{8}{12}$	38	Intussusception	Operation. Hæmorrhagic urticaria in convalescence	— — ...	5 weeks	Cured.
22	Dr. Pye-Smith ...	1896	F $\frac{17}{12}$	152A	Broncho-pneumonia. Purpura	Has been given Mellin's food since weaning	— — ..	9 weeks	Relieved.
23	Dr. Pitt	1905	F 3	221	Acute lymphatic leukæmia	Purpura universal. Large inguinal glands	Large spleen and liver ...	1 week	Death.
24	Dr. Beddard (Cl.) ...	1903	M 3	576	General tuberculosis. T. 101–103°	Admitted as hæmorrhagic measles	v. Diagnosis	1 month	Death.
25	Sir Cooper Perry ...	1905	F 5	188	General tubercle. Meningitis	Purpura. Coma	v. Diagnosis	6 days	Death.
26	Dr. Goodhart ...	1894	M 5	163	Purpura. Blood from rectum	— — ...	— — .	2 weeks	Cured.
27	Dr. Taylor	1896	M 5	206	P. Large cervical gland	Hæmic bruit. Slight fever on admission	— — ...	8 weeks	Cured.
28	Dr. Hale White (Cl.)	1902	M 8	392	P. hæmorrhagica. Anæmia	Epistaxis. Hæmatemesis ...	— — ...	3 months	Cured.
29	Dr. Washbourn (Cl.)	1894	M 6	193	P. hæmorrhagica ...	Diplococci in blood	— — ...	1 month	Cured.
30	Dr. Hale White (Cl.)	1897	F 10	511	P. hæmorrhagica. Hæmaturia	Buccal and subconjunctival ecchymoses	— — ...	2 weeks	Cured.

TABLE II.—*continued.*

	Physician.	Year.	Sex and Age.	Index No.	Diagnosis.	Remarks.	Post-mortem Examination.	Duration.	Result.
31	Dr. Hale White ...	1896	F 10	180	P. hæmorrhagica. Psoriasis	— — ...	— — ...	6 weeks	Cured.
32	Dr. Pitt	1904	M 14	370	P. simplex	Abdominal pain	— — ...	3 weeks	Cured.
33	Dr. Shaw (Cl.) ...	1901	M 5	510	Hæmorrhage from bowel?	Purpura (? traumatic). Con. pulm. stenosis	— — ...	7 days	Cured.
34	Dr. Bryant	1904	M 9	472	Purpura. ? Hæmophilia	Occasional stiffness in finger-joints	— — ...	2 months	Relieved.
35	Dr. Pye-Smith ...	1884	M 14	—	Purpura universal ...	Bleeds readily	Micrococci in venous thrombi	10 days	Death.
36	Dr. Pye-Smith ...	—	F 9	—	Purpura gangrenosa ...	Gangrene of labia	— — ...	5 days	Death.
37	Dr. Fagge	—	M	—	Purpura variolosa. T. 104°	Hæmaturia. Epistaxis. Melæna. Vomiting. Præcordial pain. Ward Clerk developed mild small-pox	— — ...	5 days	Death.
38	Dr. Taylor	1898	F 9	238	Purpura. Epistaxis. ? Hæmophilia	— — ...	— — ...	1 week	Relieved.
39	Dr. Shaw (Cl.) ...	1905	M 7	357	P. simplex	Systolic bruit. Large liver	— — ...	14 days	Relieved.
40	Sir Cooper Perry ...	1902	M 13	119	P. rheumatica	Irregular heart. P. on knees, ankles, arms	— — ...	3 weeks	Relieved.
41	Dr. Taylor	1900	F 11	59	Acute rheumatism. Bronchiectasis	Displaced heart. P. on legs and arms	— — ...	1 month	Relieved.
42	Dr. Taylor	1903	F 6½	250	P. rheumatica	Preceded by tonsillitis ...	— — ...	3 weeks	Relieved.
43	Sir Cooper Perry ...	1901	M 5	339	P. rheumatica	Fever on admission	— — ...	3 weeks	Relieved.
44	Sir Cooper Perry ...	1901	M 9	354	P. rheumatica	Sore throat. Recurrent ...	— — ...	3 weeks	Relieved.
45	Dr. Pitt	1896	M 7	254	P. rheumatica	— — ...	— — ...	6 weeks	Relieved.
46	Dr. Hale White ...	1895	M 14	278	P. rheumatica	Fever on admission	— — ...	9 weeks	Relieved.
47	Dr. Goodhart ...	1897	F 10	374	P. rheumatica	Mitral regurgitation. No fever	— — ...	4 weeks	Relieved.
48	Dr. Hale White ...	1894	M 13	288	P. rheumatica	Fever	— — ...	3 weeks	Relieved.
49	Dr. Washbourn (Cl.)	1891	F 13	457	P. rheumatica. Acute rheumatism	History of chorea	— — ...	2 weeks	Relieved.
50	Dr. Pitt	1903	F 10	370	P. rheumatica. Acute rheumatism	Tonsillitis	— — ...	3 weeks	Relieved.
51	Dr. Hale White ...	1902	M 12	34	P. rheumatica	Mitral stenosis	— — ...	4 weeks	Relieved.
52	Dr. Washbourn ..	1902	F 13	150	P. rheumatica	Mitral stenosis. History of chorea	— — ...	1 month	Relieved.
53	Dr. Beddard (Cl.) ...	1903	F 12	503	P. rheumatica. Rheumatic. Endocarditis and pericarditis	Mitral stenosis and regurgitation.	v. Diagnosis	4 weeks	Death.
54	Dr. Taylor	1898	F 8	26	P. rheumatica	Mitral systolic bruit	— — ...	3 weeks	Relieved.

TABLE II.—*continued.*

No.	Physician.	Year.	Sex and Age.	Index No.	Diagnosis.	Remarks.	Post-mortem Examination	Duration.	Result.
55	Dr. Fawcett (Cl.) ...	1903	F 15	18	Infective endocarditis. Albuminuria. Hemiplegia. Strabismus. Aphasia	Purpura. Coma. Hæmaturia. Retinal hæmorrhages	Embolism and aneurysm of mid. cer. art. Ulceration of colon. Mitral valve diseased. Ruptured chordæ tendinæ. Streptococci in blood. Infarcts in liver, lungs, spleen. Abscess in spleen	4 months	Death.
56	Dr. Pitt	1901	M 13	136	Inf. endocarditis. Mitral stenosis & regurgitation	Delirium. Purpura. No previous rheumatism	Infarct in kidney ...	4 days	Death.
57	Dr. Pitt (Cl.) ...	1901	F 6	656	Inf. endocarditis, ? Henoch General septic meningitis	Sent in as a case of intussusception	Double lobar pneumonia. Empyema	6 weeks	Death.
58	Dr. Hale White ...	1902	F 13	11	Henoch's purpura ...	Similar attack six months before. Hæmaturia persisted	— — ...	4 months	Relieved.
59	Dr. Pye-Smith ...	1897	M 15	173	P. Albuminuria. Epilepsy	Mitral regurgitation. Acute rheumatism 8 months before	— — ...	4 weeks	Relieved.
60	Dr. Shaw	1905	F 13	344	Nephritis. Purpura ...	Old Bright, readmitted with purpura. Albumin persisted	— — ...	6 weeks	Relieved.
61	Sir Cooper Perry ...	1905	F 13	314	Henoch. Albuminuria	— — ...	— — ...	1 month	Relieved.
62	Dr. Pitt	1905	10	157	P. Œdema of legs, ? Henoch	Hæmic bruit	— — ...	3 weeks	Relieved.
63	Sir Cooper Perry ...	1904	M 10	152	Henoch	Hæmaturia. Melæna. Vomiting. Albumin persisted	— — ...	4 months	Relieved.
64	Dr. Shaw	1901	M 15	121	Nephritis. Purpura ...	Mitral systolic bruit. Albumin persisted	— — ...	7 weeks	Relieved.
65	Sir Cooper Perry ...	1902	M 9	14	Henoch	Hæmaturia persisted. Frequent relapses during two years after discharge from Guy's	— — ...	2 months	Relieved.
66	Dr. Washbourn ...	1894	F 13	191	Henoch. Wasting ...	Persistent albuminuria ..	— — ...	4 weeks	Relieved.
67	Dr. Hale White .	1894	F 10	110	Purpura. Slight fever ...	Occasional joint pains. Persistent albuminuria	— — ...	2 weeks	Relieved.
68	Dr. Pye-Smith (Cl.)	1896	F 13	587	Henoch. Urticaria. Hæmaturia	Abdominal pain. Persistent albuminuria. Vomiting	— — ...	4 weeks	Relieved.
69	Dr. Hale White (Cl.)	1903	M 14½	682	Henoch. Melæna. Hæmatemesis	Abdominal and joint pains. Persistent albuminuria	— — ...	5 weeks	Relieved.
70	Dr. Taylor	1904	M 14	462	Henoch	Readmitted twice. Persistent albuminuria	— — ...	5 months	Relieved.
71	Dr. Taylor	1904	F 10	423	Henoch. Tubal nephritis	Readmitted once. Persistent albuminuria	— — ...	10 weeks	Relieved.
72	Sir Cooper Perry ...	1903	M 11	300	Appendicitis. Purpura ...	On thighs and elsewhere ...	— — ...	1 month	Relieved.
73	Sir Cooper Perry ...	1904	M 6	327	Tuberculous broncho-pneumonia and enteritis	Purpura on trunk and arms	General tubercle. Hæmorrhages in spleen. Ecchymoses under pericardium	10 days	Death.
74	Dr. Pitt	1899	M 6	348	Acute gastro-enteritis. ? Scarlet fever	Sore throat. Delirium ...	v. Diagnosis	4 days	Death.
75	Dr. Fawcett (Cl.) ...	1904	M 5	444	General sarcomatosis ...	Anæmic. T. 103°. Copious hæmatemesis	Generalised lymphosarcoma. Large liver	18 days	Death.
76	Dr. Pitt	1905	M 6	220	Acute lymphatic leukæmia	P. epistaxis. Hæmatemesis	Enlarged glands. Large thymus. Stomach full of blood. Blood clot in œsoph. Spleen 800gm. Bone marrow pinkish	3 months	Death.

III.—MISCELLANEOUS CASES.

No.	Physician or Hospital.	Year.	Sex and Age.	Index No.	Diagnosis.	Remarks.	Post-mortem Examination.	Duration.	Result.
1	Park Fever Hospital	1901	F 5	—	P. Hæmorrhagica with post-scarlatinal diphtheria	— — ...	Interstitial nephritis. Hæmorrhage into ventricles of brain and brain substance, disorganising pons and corpus striatus	1 month	Death.
2	" "	1901	M 4	—	Diphtheria. Purpura. ? Scurvy	Vomiting	Fatty degeneration	6 weeks	Death.
3	" "	1903	F 3	—	Faucial diphtheria. Purpura on trunk and face	Chemosis. Antitoxin ...	Submucous and subserous hæmorrhages	4 days	Death.
4	" "	1903	F 2½	—	Faucial diphtheria. Purpura forehead, arms, abdomen	Epistaxis. Antitoxin ...	Submucous, subpleural, subperitoneal hæmorrhages	4 days	Death.
5	" "	1904	F 4	—	Faucial diphtheria. Purpura on neck & abdomen	Antitoxin	— — ...	5 days	Death.
6	" "	1904	M 3	—	Faucial diphtheria. Purpura, thigh and abdomen	Antitoxin	— — ...	2 days	Death.
7	" "	1904	M 2¾	—	Faucial diphtheria. Purpura, neck and injection site	Epistaxis. Antitoxin ...	— — ...	7 days	Death.
8	" "	1905	M 5 5/12	—	Faucial diphtheria. Purpura	Died suddenly from heart failure. Antitoxin	— — ...	3 days	Death.
9	" "	1905	F 11	—	Faucial diphtheria. Purpura	Antitoxin. S. F. 2 months before	— — ...	3 days	Death.
10	" "	1905	F 6	—	Faucial diphtheria. Purpura	Antitoxin	— — ...	4 days	Death.
11	Eastern Fever Hosp.	1901	F 11	—	Faucial diphtheria. Purpura (10th day)	Epistaxis. Hæmorrhage from rectum. Pains in joints. T. 103°	— — ...	3 weeks	Recovery.
12	South-Eastern F. H.	1901	F 10	—	Diphtheria. Purpura. Hæmatemesis	Melæna. Pain in joints. Cardiac weakness	— — ...	3 months	Recovery.
13	Middlesex Hospital	1894	M 2	—	Vomiting. Purpura (*universal*)	T. 105°. Prostration. Unvaccinated	Hæmorrhagic suprarenals ...	48 hours	Death.
14	Dr. Andrews ...	1898	F 1 5/12	—	Purpura. D. & V. ...	Unvaccinated	Hæmorrhagic suprarenals ...	48 hours	Death.
15	St. Bartholomew's...	1901	M 4/12	—	Purpura. Pyrexia ...	Unvaccinated	Hæmorrhagic suprarenals ...	24 hours	Death.
16	Royal Free	1900	M 13/12	—	Vomiting. Convulsions. Purpura	T. 108°. Conjunctivitis Cyanosis	Large hæmorrhage in right suprarenal, Mucous hæmorrhage in left suprarenal	24 hours	Death.
17	Dr. Dudgeon ...	1902	M 3	—	D.&V. Pyrexia. Purpura	Poisoning from pork pie ...	No post-mortem	24 hours	Death.

Nelaton's Probe.

DR. F. W. COCK, who was anæsthetist at this Hospital, and to whom our Museum is already indebted for the excellent collection of old instruments on view in the show case, has again very generously presented the Museum with some instruments of antiquarian and general interest. One of the most interesting of his gifts is the original probe made for the great French surgeon, Auguste Nelaton, and probably the one used by Professor Zannetti, of Pisa, to detect the bullet in Garibaldi's ankle. This probe was given by Nelaton to Sir James Paget, who in turn presented it to his son, Mr. Stephen Paget, F.R.C.S., by whom it was given to Dr. Cock. It may be of interest to refer here to the original case in which it was used. Students of modern history will readily recall to mind the unfortunate affair at Aspromonte, which earned for that little hamlet the unpleasant nickname "*the damned*" amongst the enthusiastic followers of the great Liberator. On the 29th of August, 1862, Garibaldi and a handful of his adherents occupied the high plateau of Aspramonte, where he was attacked by the Austrians. In his autobiography the General has left on record a vivid description of his hardships there, drawing attention, amongst other points, to the nutritive value of raw potatoes, and here he received the wounds which crippled him for more than four years. One ball entered his thigh, the other lodged in his ankle, smashing the bone. He was removed to Pisa, and finally to Caprera, and at the latter place he was under the care of a whole bevy of surgeons, who ultimately advised amputation of the foot. A more grateful patient than the General, and one more ready to give the fullest acknowledgment of his great indebtedness to the profession, it would be hard to find in history. He has expressed his thanks to each of his attendants in his autobiography, and the majority of them have put on record their high appreciation of the calmness and courage with which he endured their prolonged and painful examinations. The great difficulty was to make sure of the presence of the bullet in the foot, and the majority of the attendant surgeons declared that it was too deep to be extracted.

At this point one of the General's friends bethought himself of Nelaton, then steadily rising in eminence. The French surgeon, who owed a great deal of his success to the lucky absence of a more distinguished colleague—Jobert—when called upon to attend the Emperor Napoleon, was at that time regarded as one of the most skilful practitioners of the day, and had already won a highly remunerative practice. Indeed, one of the best authenticated instances of enormous fees paid to medical men is probably that of Nelaton's honorarium when attending the Tsar's son at Nice, where he was rewarded with a fee of £16,000. An enthusiastic admirer of the Liberator, Nelaton came to Caprera at once and examined the General's wound. He has left a report of that examination which is a brilliant model of what a clinical report should be—clear, exhaustive and definite. Probing with an ordinary silver probe, he declared that he was positive that he felt the bullet, but his Italian colleagues were sceptical, although they agreed to defer amputation and adopt his treatment. The rest of the story is best recounted in Nelaton's own words as he told it to his class at the *Hôpital des Cliniques* on receiving a telegram from Garibaldi which ran as follows:—"Zannetti extracted the bullet this morning. All honour to your diagnosis." "When we consider," said Nelaton, "the variety of opinions which have been offered respecting the presence of a foreign body in the wound, it is evident that this favourable result would have been very long delayed had we not had the means of accurate diagnosis. Let me remind you that the wound is on a level with the anterior edge of the inner malleolus which has been fractured by the ball. The wound runs in a transverse direction, and the probe, introduced about an inch into it, came into contact with a hard body. The sound heard on striking this body was dull and quite unlike that produced by meeting with necrosed or carious bone. Personally, I was perfectly certain that the ball was lodged in front of the neck of the astragalus, though its presence could not be detected by ordinary examination of the instep, owing to the tension of the parts in that region. M. Porta, exploring with his finger, declined to agree with me. On my return to Paris I endeavoured to contrive exploring instruments which should convince those who were not of my opinion. I thought first of a sound ending in a kind of file which could be made to take off a few of the metallic particles, and I had such an instrument constructed, but M. Rousseau gave me an idea for another instrument. I had a probe made to the end of which was fixed an olive-shaped body, made of unglazed china, upon which mere contact with lead would leave a mark. Several instruments of this kind were made for me by M. Charriere, each formed of a silver stem with a tiny china knob at the end. The mere rubbing of this instrument against lead would leave a stain which neither the soft parts nor the morbid secretions of the wound could obliterate. Armed with this instrument, Professor Zannetti became so certain of the presence of the ball in the spot I had indicated, that he successfully attempted its removal." The prevalent idea that Nelaton himself first used the probe is erroneous. He made his diagnosis entirely by manipulative examination with an ordinary probe and gave Zannetti full credit for confirming it with the modified instrument which he sent from Paris. He also, in combination with a colleague, constructed an electrical probe, a model of which was sent to Caprera, but never used, as the porcelain knobbed probe sufficed to detect the ball. Nelaton, it may be mentioned, visited England several times, and stayed for a time at Chislehurst, paying frequent visits to some of our hospitals, amongst them being Guy's. Although it is not perfectly certain that the probe now in the Museum is the one which was actually passed into Garibaldi's ankle, it is certainly one

of the instruments originally constructed by Charrière for Nelaton, and, as such, is of special interest.

Another lot of highly interesting old instruments has been received from Dr. E. W. Valentine, an old Guy's man. They include a pair of very old craniotomy forceps, and two pairs of forceps, one of which shows the remains of the original leather covering at the ends; they probably date back to the eighteenth century. For some other interesting additions to the collection, the Museum is indebted to the generosity of Mr. Golding-Bird.

Appointments.

Civil.

ALLEN, R. W., M.B., B.S. Lond., has been appointed Pathologist at the Royal Eye Hospital, S.E.

ASHWIN, R. HAMILTON, M.D. Lond., has been appointed Certifying Surgeon under the Factory and Workshop Act for the Market Weighton District of the County of York.

ELLIS, ROY, L.D.S. Eng., has been appointed Dental Surgeon to Ponting Brothers, Ltd.

HARDING, CHAS. H., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer to the Northern Division of the Whittlesea Union, and Public Vaccinator to the Whittlesea Rural District.

RECORDON, R. B., L.D.S.R.C.S. Eng., has been appointed Assistant Honorary Dental Surgeon to the York County Hospital.

Naval.

Fleet-Surgeon W. J. BEARBLOCK, R.N., has been appointed to the *Hawke* on recommissioning.

Change of Address.

Mr. H. J. Corin, L.D.S. Eng., from 2, Suffolk Place, Pall Mall, S.W., to 9, Old Burlington Street, W.

Mr. F. J. Gillett, L.D.S. Eng., from Guy's Hospital to Westcombe, Station Road, New Southgate, N.

Dr. C. H. D. Ralph, from Accra, Gold Coast, West Africa, to Canford Cliffs, Bournemouth.

Mr. Owen Richards, M.Ch., F.R.C.S., from 27, Lancaster Gate, W., to the Turf Club, Cairo, Egypt.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Guy's '89 Club.

THE 12th Annual Dinner of the above Club was held at the Hotel Cecil, on May 9th. Mr. J. Steinhaeuser was in the chair, and a very pleasant evening was passed. The following members were present:—J. R. Steinhaeuser, W. L. Stuart, H. J. Spon, C. H. Fagge, H. Hewetson, R. H. Hayes, W. H. Peake, B. G. Reynolds, J. Moore, F. J. Nicholls, C. D. Edwards, G. S. Hovenden, E. C. Taylor, H. A. Moffatt, R. F. Clark, H. M. Stewart, J. A. Howard, A. H. Partridge, A. P. Beddard, F. J. Steward, E. F. H. Hardenberg.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

A Suggestion.

DEAR SIR,—The GAZETTE is better than ever, but I notice you have begun again the bad system of dividing lectures and papers. In the current number you finish Mr. Lane's lecture and begin the paper on Purpura—surely a very little management would make this unnecessary? But for this, the GAZETTE is as good as it can be, and I think is not far off being the best medical paper published. I want to make a suggestion—it has been in my mind for some time. Would it not be possible to collect the Clinical Lectures and publish them in book form—say at the rate of a volume a year? I believe they would have a good sale, and undoubtedly in a few years they would form a most valuable series for reference. I hope you will think the suggestion worth serious consideration.—Your obedient servant,

J. H. GIBSON.

[We deal with this suggestion in "Passim."—ED.]

The Students' Glee Club.

DEAR SIR,—May I, through your columns, bring before the notice of all interested in music the existence and intentions of the Students' Glee Club?

Many new men have come up to Guy's this session, and several of our older friends have now temporarily done away with the strain of examinations. To these and others I should like to say that practices will be resumed on Fridays, at 5 p.m., in the Court Room, and will be continued throughout the summer session.

Whether or not the suggestion of another performance (made in "Passim") be fulfilled, depends on the regularity with which the members attend these practices.

The Orchestral Society is also continuing its practices on Wednesday evenings at 8 p.m., and would welcome the appearance of new instrumentalists.

For the benefit of those who do not already know it, I may add that the Orchestral Society, Students' Glee Club, and the Nurses' Choral Society form the three sections of the Guy's Hospital Musical Society. Owing to the latter's sound financial condition, the annual 2s. 6d. subscription to the Glee Club is to be dispensed with. Men may, therefore, henceforth obtain all the advantages of membership without any additional expense.

Mr. Mollison would supply anyone with details of the Orchestral Society, and any information regarding the Glee Club or G. H. Mus. Soc. will be gladly given by the Secretary or Committee.—Yours faithfully,

F. A. BARKER,
Hon. Sec.

May 15, 1906,

The Case of the Extern.

DEAR SIR,—May I draw your attention to a slight (!) error in a statement which appeared in "Passim" of your last issue, to wit, that the Externs are charged 10s. 6d. a "month" for their tenements in the College? Of course they are really charged, I had almost said surcharged, 10s. 6d. per "week."

There is another little matter which may be of interest to those of your readers who still bear up under the much-discussed idiosyncrasies of the Club catering. Some months ago a Committee was elected to oversee, among other duties, this anomaly. Words suitable on the one hand for comment, and on the other for publication in your columns, are not vouchsafed me, but let me state the fact, that at least one of the members of that Committee has not yet received any official intimation of his election!—I am, Sir, yours, etc.,

The Den. EXTERN.
May 8, 1906.

Pass List.

University of Cambridge.

EXAMINATION FOR THE DEGREE OF M.C.

W. M. Mollison, M.A., King's College.

THIRD EXAMINATION FOR MEDICAL AND SURGICAL DEGREES.

PART II.

SURGERY, MIDWIFERY AND MEDICINE.—H. J. Clarke, B.A., Trinity College. R. Davies-Colley, B.A., Emmanuel College. C. F. Fothergill, B.A., Emmanuel College. A. S. Morton Palmer, B.A., Jesus College. W. H. Robinson, B.A., Downing College. A. Walker, B.A., Emmanuel College.

Royal College of Physicians of London, April, 1906.

ELECTED TO THE FELLOWSHIP.

Maurice Craig, M.D.

Royal College of Physicians of Edinburgh, May, 1906.

ADMITTED TO THE MEMBERSHIP.

Augustus Kinsey-Morgan, M.D.

Royal College of Surgeons of England, May, 1906.

PRIMARY FELLOWSHIP EXAMINATION.

H. I. Janmahomed, J. S. Cooper, C. F. L. Leipoldt, H. Chapple, A. N. Leeming, V. Townrow.

FINAL EXAMINATION FOR THE LICENCE IN DENTAL SURGERY.

PARTS I. AND II.—*H. G. Clark, *S. G. Elliott, *C. C. Freer, *F. M. Holborn, *H. E. Marsh, *H. L. Power, *J. E. O. Brawn, *J. W. Meadows, *E. S. Pierrepont, *C. G. G. Lewis.

PART I. ONLY.—F. W. Bartle, E. Barnett, G. Ll. Davies, F. Giles, R. A. Glindon, I. Margolies, R. J. Oliver, G. Packham, A. H. Pickett, N. V. H. Riches, R. R. B. Ponder, C. R. Rudolf.

PART I. ONLY.—*W. J. P. Dicks, *W. Elwood, *R. P. Fenn, *F. J. Gillett, *W. H. Plowman, *H. Simms, *A. E. Webb, *W. E. Freeman.

*Denotes completion of examination.

LICENCE IN DENTAL SURGERY.

FIRST PROFESSIONAL EXAMINATION.

MECHANICAL DENTISTRY AND DENTAL METALLURGY.—W. F. Boxall, S. W. Chetwood, H. J. Dear, J. W. Doherty, F. N. Doubleday, W. A. Dredge, A. H. Gabell, R. J. Gibbings, P. R. Helyar, L. J. Kemp, R. M. King, W. Grant Oliver, J. R. Palmer, P. J. Proud, I. S. Spain, H. Sturton, H. P. Tait, Hedley C. Visick, H. Walker, W. F. Whiteley, R. M. Wormald.

MECHANICAL DENTISTRY ONLY.—W. E. Guilding, A. M. Henry, P. E. Kendall, I. Levy, *H. O. Salt.

DENTAL METALLURGY ONLY.—E. J. Archer, F. O. Hume, M. J. Marks, C. R. M. Peaty.

Sport.

Cricket.

GUY'S v. BECKENHAM.

Result.—Draw.

The season opened on May 5th with a match against Beckenham, on the latter's ground. The wicket was a plumb one, and though several of the players had evidently not yet got into form, there was some high scoring. Beckenham won the toss, and lost 3 wickets for 28, but then H. Z. Barker and Browne made a long stand. A separation was effected after lunch, however, but Baker continued to play fine cricket, and when the innings was declared closed, was not out—121. After Riches and Kahlenburg, the bowling was very weak. Kahlenburg bowled excellently, and took 5 wickets for 46. The fielding was very fair, Barnett making a fine catch in the slips.

Guy's made a fine start in answer to their opponent's formidable total, Barnett and Simms putting on 115 for the second wicket before the latter unfortunately ran himself out. Besides these two no one else made double

figures. Barnett played beautiful cricket without giving a chance. Score:—

Beckenham.

H. E. Barker, lbw, b Kahlenburg	8
A. M. Lewis, c Barnett, b Riches	2
F. Street, c Tolhurst, b Kahlenburg	14
H. Z. Barker, not out	121
F. D. Browne, c Young, b Kahlenburg	54
R. Curwen, b Kahlenburg	1
J. K. Stenning, b Kahlenburg	0
H. B. Vincent, b Young	27
L. Simpson, c Barnett, b Smith	7
E. J. Price, not out	20
Extras	23
Total	277

A. Grinvide did not bat.

Innings declared closed.

Guy's.

E. Barnett, st Curwen, b Grinside	127
G. C. Covell, b Stenning	8
H. Simms, run out	49
H. V. Gibbons, lbw, b Browne	1
N. V. Riches, b Browne	4
P. Smith, b Grinside	6
A. M. Tolhurst, c H. Z. Baker, b Grinside	0
M. M. Munden, not out	7
F. Kahlenburg, c Stenning, b Grinside	0
Extras	11
Total	213

P. V. Pedrick and J. F. Young did not bat.

GUY'S v. LONDON COUNTY.

Result—Lost by 56 runs.

Played at Honor Oak on Wednesday, May 9th. A heavy shower of rain just after lunch made the wicket difficult for the Hospital. Kahlenburg bowled excellently, taking 8 wickets for 62. Scores:—

London County.

W. G. Grace, b Kahlenburg	10
P. G. Gale, b Kahlenburg	32
E. H. D. Sewell, c Riches, b Kahlenburg	4
E. P. Kay, c Smith, b Kahlenburg	1
A. Marshall, c & b Kahlenburg	69
W. Murch, b Kahlenburg	7
L. Covell, lbw, b Kahlenburg	8
S. E. Walresley, b Chase	0
— Penfold, lbw, b Chase	37
F. Pritchard, c Covell, b Kahlenburg	8
R. S. Bennett, not out	2
Extras	16
Total	194

Guy's.

N. V. Riches, c Sewell, b Penfold	16
G. Chase, c & b Pritchard	15
E. Barnett, b Penfold	32
P. Smith, b Grace	4
H. V. Gibbons, b Penfold	6
G. C. Covell, st Murch, b Grace	10
H. Simms, b Penfold	0
A. M. Tolhurst, b Penfold	4
P. Pedrick, b Marshall	27
F. Kahlenburg, not out	13
J. F. Young, c Marshall, b Penfold	0
Extras	11
Total	138

GUY'S v. R. I. E. C.

Result—Won by 93 runs.

Played at Cooper's Hill on Saturday, May 12th. Guy's were not at full strength, but won easily. Kahlenburg and Chase bowled unchanged throughout the innings, and were well backed up in the field; the catch which dismissed Burrough being a very fine one. The runs were knocked off for the loss of 5 wickets, Chase hitting merrily for 75 not out.

R. I. E. C.

Rev. J. Burrough, c Ingram, b Chase	30
G. E. de Smidt, c Pedrick, b Kahlenburg	12
E. P. Burke, b Kahlenburg	0
H. T. Humfress, c Pedrick, b Kahlenburg	11
Capt. Browne, b Chase	15
S. G. Stubbs, b Chase	18
L. M. Priday, run out	2
A. Croad, b Kahlenburg	4
G. P. Connor, b Chase	15
A. Izat, c Smith, b Kahlenburg	1
A. G. Ronald, not out	12
Extraa	3
Total	123

Guy's.

M. M. Munden, c Browne, b Burrough	21
H. V. Gibbons, b Burrough	4
P. Pedrick, run out	32
P. Smith, b Connor	25
H. Simms, c Stubbs, b De Smidt	21
G. Chase, not out	75
G. C. Covell, b Connor	11
W. Ingram, b Connor	8
E. C. Hunot, st Humfress, b De Smidt	3
H. Munden, c Moncrieff, b De Smidt	0
F. Kahlenburg, b Connor	3
Extras	13
Total	216

Birth.

HOLMAN.—On May 3rd, at Galeston, Eton Avenue, Hampstead, the wife of Frank Kay Holman, M.D., M.R.C.S., L.R.C.P., of a son.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

THROUGH the death of Dr. Bryant this Hospital loses one of its most energetic and enthusiastic workers, the members of the Staff a generally popular colleague, and the students a respected and appreciated teacher. He was known to all of us: even the juniors in the dissecting-room knew him as a teacher through their attendance at the tri-weekly materia medica lectures. He was one of those we could ill spare, and his death leaves a gap which it would be difficult to fill. It is unnecessary here to comment on his career or to write an appreciation of his merits as a physician and as a man. Elsewhere in this issue that has been done by those who knew him intimately, and these tributes of personal regard show how great a loss we have sustained through his death. We can only express our own appreciation of that loss, and to his relatives and friends our cordial sympathy with them at this moment.

THE great American essayist who wrote of English publications that "their tone is prone to be official, even officinal," never had the privilege of reading his GUY'S GAZETTE, else he might have adduced this journal as a type of periodical which is mainly, if not wholly, officinal. To a certain extent it is inevitable that we should depend on "shop." Essentially a medical paper, devoted to the interests of a hospital and a large medical school, with the major part of its readers medical men and persons interested in everything that appertains to medical science, the GAZETTE does not stand on the same footing as he rest of the weekly and fortnightly journals. But it is possible, also, that we have made too much of our necessities, and that in relying so largely upon officinal contributions we have come to undervalue the possibilities in other directions. It is a pity, for instance, that the GAZETTE has not become a medium for a broader and more general exchange of opinion, for discussion, and, one might go so far as to say, for controversy on points which, although perhaps outside the range of ordinary hospital politics, have yet a bearing on medicine and an interest for readers generally. Old Guy's men, away from what may be called the ephemeral

issues of hospital life, complain of our lack of vitality. They point out with truth that discussion and interchange of opinion are as much requisite for the life of a paper as they are for the continued existence of a debating society. It is not too late in the day to remedy the defect, and the desirability of doing so is a point which we would earnestly commend to readers generally.

OUR columns are always open to anyone who cares to initiate a discussion on any topic which is large enough and important enough to deserve attention from its bearing, either direct or indirectly, upon subjects which appeal to us as medical men and medical students. There are many such questions, and this present issue furnishes at least one of them. Through the courtesy of Dr. Haldane, we are enabled to publish the full text of the first of two lectures delivered by him at this hospital on a subject which is of more than purely officinal interest, and in our next issue will appear the text of the second lecture. It is scarcely necessary to point out the importance and the highly-controversial nature of Dr. Haldane's article, and it is equally needless to state that there are many of us who will be inclined to join issue with the lecturer on several points, just as there will be others who will heartily agree with him. Nor do we imagine that Dr. Haldane will object to sane and tempered criticism, whether favourable or unfavourable, of his lecture. Here, then, is a subject which is worthy the attention of our controversialists, and as this is the slack season, with both the Physiological Society and the Debating Society enjoying a brief period of repose, we feel justified in expressing the hope that someone will make a start by discussing the old, old question of Vitalism versus Mechanism.

NOR, because it is old and well worn, is this subject less interesting or less open to discussion than it was in the days of Aquinas. We are not made as Birmingham buttons, with our opinions and thoughts irrevocably stamped on us, subject to no alterations from new currents and new impressions. Possibly—probably—there are among us some who have ideas and remarks, armchair critics indeed, at whom some of us scoff, but who are none the less interesting to hear and instructive to follow. There is no necessity to point out the utility and practical value of such discussion as we invite. When a man puts his arguments and criticisms to paper he has a harder task before him than when he stands up to attack or defend a theory or a statement. He has need for greater caution, and for keener discrimination than in debate. But these considerations need not debar anyone from discussing the matter, and we shall be glad to receive, and to publish, any criticisms or opinions for or against Dr. Haldane's interesting paper.

THE report of the Guy's Hospital Ladies' Association for the year just ended shows very clearly the extent of the work which has been carried on by this excellent society during the past twelve months. At the annual general meeting of the Association, held last week, the Countess of Bective, in the course of her opening remarks, which we publish in this issue, drew attention to the urgent desirability of creating additional branches of the Association, and to one or two other points which should be more widely known and considered. For almost a dozen years the Association—started, we believe, in an unobtrusive manner with merely a few members—has done sterling good work for the hospital, more particularly in contributing clothing and ward garments, but also in collecting money for the upkeep of several of the maternity beds, and—a matter, perhaps, of greater importance—in making the needs of this institution more widely known. This year the Association contributes £200 towards the support of beds in the maternity ward, while the junior members give £6 odd as a special donation in aid of a cot. In every way the Association appears to be flourishing, but at the same time there is room for the establishment of more local branches. There are some districts which have no representatives in the Association—districts, too, which have an interest in this hospital—and it is to be hoped

that the ensuing year will see the inception of many local branches. Meanwhile, everyone interested in Guy's Hospital owes a debt of gratitude to the Association for the good work it has done during the past year.

THE Thomas Young course of lectures at St. George's Hospital will this year be delivered by Professor Osler, who has taken for his subject, "The Study of Abdominal Tumours." There will be six lectures in all, and in the first, on Tuesday next, Dr. Osler will deal with the life and work of Thomas Young. These lectures are free to practitioners and students, and all who have had the pleasure of listening to the Regius Professor's brilliant handling of subjects which are of both historical and professional interest, will be glad to avail themselves of this opportunity of hearing him.

WE have to acknowledge the receipt of several letters offering suggestions, in response to the invitation in the last issue, for the arrangement of the clinical lectures. Some of the suggestions, though evidently well meant, are scarcely practical, and one at least—the post-card advice to drop clinical lectures entirely—is so obviously intended as a joke that it need not be considered seriously. Amongst the other suggestions there are few that are original, and only two that seem to be within the power of the publishing department to try and experiment with. One of these, emanating from an old subscriber to the GAZETTE, is that the clinicals should be inserted in the middle of the number instead of at the beginning, as they are now. In that case subscribers wishing to bind their clinicals separately can do so by merely removing the wire stitches and collecting the papers in that way. With a little arrangement and spacing we venture to think this suggestion may be carried into effect, and we propose, at any rate, to try it in the next issue. Another suggestion is that the clinicals should be published as an offslip, or supplement, and inserted loosely into the body of the GAZETTE; but when one bears in mind that each ordinary number of the paper is largely made up of clinical matter, this suggestion hardly seems so good or so worthy of trial as the other. Loose slips in the body of an issue are generally a nuisance, and entail more trouble in additional stitching and arrangement. Under the circumstances, and while waiting for further suggestions, it seems worth while to try the alternative suggestion and to insert the lectures in the middle of the issue, leaving to individual subscribers the choice of having them bound up separately, or incorporated in the GAZETTE as a whole.

THE decision of the Library Committee to add duplicates of the more generally used text-books to the reference shelves will be cordially appreciated. In the past it has been a frequent complaint that one could never be certain of obtaining some popular books, except by coming early and taking possession of the desired volume before any other reader appears on the scene. In not a few cases, too, readers acted in a dog-in-the-manger fashion, taking out a text-book, placing it on a table, and then going away to a lecture or to lunch, leaving a note-book or a reversed chair as evidence of their right of possession. To the late comer who has conscientiously trotted round the wards with the Registrars, and who desires half an hour's quiet reading, it is inexpressibly galling to find the book which he wants "out," but unused, and yet there does not seem to be any remedy in his case.

ANOTHER, and perhaps a more serious grievance, is that some books are taken out of the library and not returned when finished with. In some cases they are kept for days, if not weeks, and that notwithstanding the fact that the library rules expressly state that they can only be retained over nights and are to be returned the day after removal. This wholesale keeping of text-books is grossly unfair to those who use the library for purposes of study. Another point to which attention should be drawn is the pernicious practice, which some readers indulge in, of underlining passages and making marginal remarks, often of an irrelevant and usually of an irritating character, in the text-books. It is a practice which cannot be too

strongly condemned, and against which the Librarian cannot very well guard. We are particularly fortunate in our Librarian, whose courtesy and kindliness to borrowers and readers are appreciated by all, and it is only right that readers should help him in his task of looking after the books. We feel sure that the complaints to which we refer are mainly due to thoughtlessness on the part of some readers, and that once the difficulties they give rise to are pointed out they will for the most part cease to exist.

THE appeal of the Clubs' Union for funds to pay off the debt has now resulted in a sum of £214 odd raised by subscriptions from Guy's men. It is a satisfactory result, but there is still some £100 wanting to make up the required sum, and further subscriptions will be gladly received. The acquisition of the full amount required will enable the Committee to wipe off the debt, and to use current subscriptions (which, it may be stated, cannot be used to pay off the old debt) for the upkeep and improvement of the Clubs' Union.

TO-DAY the Athletic Club holds its Annual Sports Meeting at Honor Oak Park ground, and an interesting and eventful afternoon is forecasted by those who claim to speak with some knowledge on such subjects. In one way it is perhaps to be regretted that the Committee has fixed on a Saturday afternoon, but we understand that in a great measure the decision was due to the fact that the Club wants funds, and that Saturday holds out a better prospect for a good "gate" than any other day in the week. It would be interesting, therefore, to see if the new arrangement is justified by results. The Inter-Hospital Sports will be held early this month, and the events this afternoon will therefore be eagerly watched, so as to enable us to estimate our chances in the coming competition.

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Life and Mechanism.

Two Lectures delivered at the Physiological Laboratory, Guy's Hospital, May 17th and 24th, 1906, by

J. S. HALDANE, M.D., F.R.S.,
Fellow of New College and University Lecturer in Physiology, Oxford.

LECTURE I.

GENTLEMEN, — As any branch of science advances it becomes necessary from time to time to examine, and if necessary modify or recast, the fundamental working hypotheses by means of which we seek to interpret the mass of concrete observation and experimental results constituting the matter of the science. To undertake such an examination in the case of physiology is, I am well aware, an extremely formidable task, and I should not venture upon it were I not convinced that a fresh examination is at present greatly required, and were not the subject one which has been constantly before my mind for many years.

To make this examination at all complete it will be necessary to survey the whole ground covered by physiology, and such a survey in the course of two lectures cannot be a detailed one. As my object is only to reach general conclusions, I shall endeavour to present only a general, or "low-power" view of the subject-matter under discussion. For want of such a general view physiology has, I think, drifted into an unsatisfactory position, fundamental questions having been lost sight of through too exclusive concentration on investigations of detail.

THE VITALISTIC THEORY.

It will be generally admitted that for the last fifty years the acknowledged working hypothesis of nearly all physiologists and biologists has been what may be designated as a mechanistic one. The object they have set before themselves has been to attain to physical and chemical explanations of the phenomena of life, and their working hypothesis has been that these phenomena are in ultimate analysis physical and chemical phenomena. Most biologists would, however, qualify this hypothesis with respect to consciousness, regarding this either as an accompaniment not influencing the physical and chemical changes, or as influencing only certain of them, but in any case as something on which physics and chemistry can throw no light, and which biology as such

must ignore, leaving it to be dealt with by psychology.

Previously to the middle of last century the common working hypothesis among physiologists was dualistic. It was generally believed that a great part of physiological phenomena could be explained on physical and chemical principles, but that there remained another and perhaps greater part which necessitated the assumption of a factor special to living beings—the so-called "vital force" or "vital principle." This "vital force" was believed to interfere with and guide physical and chemical forces; and wherever the latter seemed insufficient to account for organic phenomena the balance of what could not be accounted for was attributed to the influence of vital force.

Before proceeding further it is necessary to examine carefully the causes of the almost universal abandonment of the theory of vital force, and the dualistic working hypothesis generally known as "vitalism." These causes were, it seems to me, two in number. One was, broadly speaking, accidental and temporary; the other permanent in its influence.

The first of these causes was the fact that about the middle of last century many of the younger physiologists were convinced that they were on the point of being able to assign physical and chemical explanations to phenomena which had previously been referred to the influence of vital force. In describing his celebrated discoveries as to the animal cell, Schwann had in 1839 put forward the theory that cells are produced by a process akin to crystallisation. This was of course a direct attack on the prevailing vitalistic theory that growth is directed by vital force. Du Bois Reymond's observations on animal electricity, published in 1848, seemed to afford a prospect of an electrical explanation of the action of nerves; and Marshall Hall's theory of reflex action (1833) pointed towards a mechanistic theory of the central nervous system. Liebig's writings on chemical physiology gave a great stimulus to purely chemical explanations of the phenomena of animal metabolism, although he himself strongly supported vitalistic theories of muscular movement. Another heavy blow against vitalism was delivered when Meyer (1845) pointed out that there is no need to invoke vital force as a source of the energy of muscular movement, since the energy liberated by oxidation is sufficient to account for what appears in muscular movement. Ludwig's Text-book of Physiology, which appeared in 1852—1856, practically treated physiology as a branch of physics and chemistry, and in it were put forward his well-known mechanical theories of secretion, and other processes. The publication of Darwin's *Origin of Species* in 1859 gave a further great impetus to the mechanistic movement, not only in physiology, but in the whole of biology.

The second cause of the abandonment of vitalism was the inherent weakness of the vitalistic position. "Vital force" was conceived as something which interfered, now in the way of opposing, and now of strengthening, physical and chemical forces, the result of this interference being that the structure and functions of the living body are built up and maintained. It is evidently improper to call such an influence a "force," and the use of such an expression is evidence of confused thinking. The conception of force has no meaning except as an interaction between portions of matter, this interaction being, moreover, not capricious but perfectly regular. "Vital force" was conceived as acting upon matter from nothing, and acting capriciously.

If this objection were waived a further one remained. It was impossible to clearly isolate the influence of the supposed vital force; for in the cases where vital force was supposed to act the physical and chemical conditions were always so complex that the limits of their influence were not definable. Apart from these complex physical and chemical conditions the supposed vital force never manifested itself, and all efforts to demonstrate within living organisms any source of energy other than the potential or kinetic energy introduced into the body from the environment have completely failed.

"Vital force" thus represented a confused conception, and was incapable of verification by any experiment. It was consequently useless as a means of explaining phenomena or suggesting definite paths of investigation, and was even blocking further progress. The mechanistic theory, on the other hand, suggested at every point clear and intelligible working hypotheses for further investigation, and thus appealed strongly to physiological investigators.

THE MECHANISTIC THEORY.

It is now necessary to examine the mechanistic theory itself. Impossible as it seems to return to vitalism, it is nevertheless very plain that a strong undercurrent in a vitalistic direction exists in the physiology of the present time, and has greatly increased in strength during the last thirty years.

The progress of investigation has shown that, so far from cell-formation being a simple physical and chemical process, each cell arises by a complex process of division from a pre-existing cell, and possesses from the beginning the apparent autonomy and complexity of metabolism of an independent living organism. When it was first realised that not the cell wall but the semi-fluid albuminous contents or "protoplasm" constituted the essential part of a cell, it was believed for a time that a definite physical basis of life had been reached. It gradually became evident, however, that the expression "protoplasm" has no more definite meaning than the word "flesh" as applied to the body substance generally. What at first appeared under the microscope as small masses of gelatinous substance turned out to be living organisms presenting on a small scale the essential complexities of function and structure which any independent living organism presents. Ludwig began his text-book of physiology with an account of atoms, molecules, etc.; later physiology must perforce start from the living cell.

When we turn to other sides of physiology a similar change of standpoint is very evident. What were fifty years ago believed to be simple physical and chemical processes have turned out to be only one side or another of the extremely complex activity constituting cell life. In Liebig's time the exchange of material in respiration was believed to be a comparatively simple chemical process of oxidation, dependent for its intensity on the supply of oxygen and of oxidisable material in the body fluids. The investigations of Pflüger and others have shown, however, that the oxidation is directly dependent on cell-activity. It does not, like ordinary chemical oxidation, increase or diminish in proportion to the varying supply of oxygen brought to the seat of oxidation, but is controlled by the living cells. The problem of oxidation in the living body is thus only one side of the general problem of cell-activity.

To take another instance, secretion, excretion, and absorption, have all been shown by the work of Ludwig, Heidenhain, and others to be not mere physical processes of filtration and diffusion, as was generally supposed fifty years ago, but to depend, like physiological oxidation, on cell life. If the secreting or absorbing cells die, or their activity is interfered with by a drug, or an insufficient supply of oxygen, or of anything else which is essential to cell life, secretion or absorption quickly stops.

To whatever department of physiology we may turn we are faced by the same fact—that all elementary physiological processes have turned out to be only different aspects of the same problem—that of cell nutrition or cell metabolism. The physico-chemical explanation of this has, on the other hand, made no progress whatsoever. Indeed, the further investigation is carried the more remote does the prospect appear of any physico-chemical analysis being ever reached. Had it turned out that there was no direct and immediate connection between the different "chemical" processes occurring in cells, or between the "chemical" and the "physical" processes, it would doubtless have been possible to point to considerable progress towards physico-chemical explanation. We might have seen successful electrical theories of nervous and muscular action, filtration and diffusion theories of secretion and absorption, chemical theories of oxidation and other metabolic changes, crystallisation theories of tissue growth. But all attempts at such theories have been complete failures, so far; and the prospects of their success are unmistakeably becoming less and less with every year.

It is also becoming increasingly evident that the relations between cell metabolism and cell environment are of enormous complexity. Physiological, pathological, and experimental embryological investigation are yearly furnishing further and further proofs that the metabolism of each cell in the body is dependent in the most intimate, complex, and far-reaching manner on its physiological relations to the other cells of the body. Thus the problem of the life of any single cell in an organism really involves the problem of the life of the whole of the cells. The analysis of the life of an organism into the activities of its constituent cells would thus seem to be by no means a simplification of the problem of physiology,

The failure of mechanistic theories to explain physiological processes would not by itself explain the constant tendency to relapse into the old vitalism. Alongside of this failure there is the evident fact that living organisms, unlike machines, have the capacity of preserving their normal structure and activities in spite of considerable vicissitudes in environment. They actively select from the environment and give or discharge into it the material and energy requisite to the fulfilment of this end, and thus possess what appears to be active autonomy. To explain this unity of aim in physiological processes the mind naturally tends to assume the existence of a special agency controlling

physical and chemical processes in living organisms; and with the failure of physico-chemical explanations this tendency naturally grows in strength.

From the mechanistic side it may be urged that the apparent active autonomy of living organisms can be fully accounted for as the accumulated result of natural selection, acting through countless generations; since organisms which do not actively preserve and reproduce their structure and activities will be eliminated in the struggle for existence. This contention is, however, open to a fatal objection. In order that natural selection may influence evolution it is necessary to assume that each organism actively maintains and reproduces its particular structure and activities. The co-ordinated activity and general fitness for its special function which are so conspicuous in each part of an organism, are relative only to the continued existence and reproduction of the organism as a whole. It is only on the presupposition that the organism as a whole is to be what it is that the structure or activity of any one part is adapted to its functions. If, to take an example, we presuppose that the metabolism of a warm-blooded animal is to be on the existing scale, then the lungs, alimentary canal, kidneys, circulatory system, etc., are admirably adapted to their purpose. But if we proceed to ask whether, considering only the fitness of the organism to survive in any form, such extravagant metabolism is needed, or whether any metabolism at all is desirable, and if not whether the lungs and other organs are not a superfluous source of weakness, we are engaging in an inquiry which to a biologist is barren and meaningless.

The principle of survival of the fittest would thus have no significance in the organic world but for the presupposition that the life of every organism is an actual struggle to realise in itself and its descendants a certain type of structure and physiological activity. In other words, the active autonomy of living organisms is itself one of the bases of the Darwinian theory, and hence cannot be explained as a result of natural selection.

It also follows that the direction in which natural selection influences evolution is determined, not merely by the blindly-acting influence of the environment, but by organisms themselves. The survival of any one of the endless small variations in structure or function on which natural selection acts must depend, in the long run, on whether or not this variation tends towards the fuller realisation of organic autonomy in the species concerned.

We must now push our examination of the mechanistic theory of life still further. It has already been pointed out that physiological investigation has shown more and more clearly that if life is a physico-chemical process, the process is one of enormous complexity and delicacy of adjustment. On the mechanistic theory this must depend on a corresponding complexity and delicacy of adjustment in the structure of living cells; and we must once and for all remove from our minds any idea that "protoplasm" is in any sense simple in its structure. Now we are met at once by the fact that the more complicated and definite we assume living structure to be, the more clearly does another difficulty in the mechanistic theory emerge—namely, that of explaining the phenomenon of reproduction. If we assume, as we are compelled to do on the mechanistic hypothesis, that each cell in the living body is an extremely complicated, and yet definite, mechanism, most delicately adjusted to its particular position and function, we have also to explain how this enormously complicated mechanical system can reproduce itself indefinitely in its offspring. The "mechanism" of reproduction must be more complicated than the mechanical system which it reproduces, for the process of reproduction has to be carried through numerous complicated stages before the final product, inconceivably complicated as it is, can be produced. All this mechanisn must be supposed to be concentrated in the nucleus of the reproductive cell. But even this is by no means all; for the reproduction of the mechanism of reproduction has itself to be provided for, and its reproduction in turn, and so on indefinitely. The matter is still further complicated by the fact that in sexual reproduction two "mechanisms" of reproduction have to fuse together in order to produce the result.

It seems to me impossible to avoid the conclusion that when the facts of reproduction are fully and fairly faced the mechanistic theory of life must be abandoned as altogether inconsistent with the facts. It is evident that the difficulty is not avoided by assuming that the definiteness with which the ovum reproduces the complicated structure is due, not to the existence of a definite mechanism of reproduction in the nucleus of the ovum, but to the fact that its growth is determined in the right direction by the peculiar constitution of its environment. This assumption only shifts the difficulty from one place to

another, and does not in any way help towards a mechanistic explanation.

Some writers on the subject of heredity have contented themselves with the idea that a sufficient mechanistic explanation of heredity is afforded by the hypothesis that the offspring is like the parent because each is developed from a portion of the same "germ plasma." They first treat "germ plasma" as if it were nothing but a structureless solution or jelly with the capacity of increasing in quantity at the expense of the environment. As one portion of such a jelly is qualitatively the same as another, it follows that each portion has the same potentialities, and is therefore equally capable or incapable of developing into a complete organism. But to explain the actual capacity which an ovum possesses of developing into a complicated organism it is necessary to ascribe to the concerned portion of the "germ plasma" an enormously complicated structure; and this the same writers proceed to do, quite regardless of the simple "plasma" from which they set out. Reasoning of such a kind need hardly be considered further. The "germ plasma" cannot be both a simple "plasma" and an enormously complicated structure. If it is the former, the development of an organism from it cannot be accounted for; if the latter its own formation cannot be accounted for.

The impossibility of explaining heredity is not, however, an isolated difficulty for the mechanistic theory of life, for in reality a similar difficulty is everywhere present in connection with physiological phenomena. It is met in a very definite form in connection with the facts of embryology and reproduction of lost parts. The accumulated experimental evidence of the last few years shows that when a cell, or group of cells, normally destined to develop into a certain part, such as one half, of the adult organism, is removed or displaced in an early embryo, a whole embryo will still be often formed. If, therefore, the developing embryo is nothing but a complicated mechanism, we are driven to the conclusion that it also contains additional developmental mechanisms, capable of coming into action when the original mechanism is disturbed; and as the variety of disturbances which can be compensated for is indefinitely great, so the number of supplementary developmental mechanism must be indefinitely great. The reproduction of lost parts in an adult organism is a similar case. In the higher animals lost portions of the body are reproduced to a relatively limited extent, but in lower animals reproduction of lost parts is very common. It is impossible to believe that living cells possess a pre-arranged structure of such infinite complication that reproduction of lost parts can be not only brought about in one particular way, but also in an apparently infinite number of different ways, corresponding with the infinite number of different ways in which the injury recovered from is brought about.

Apart from accidental or experimental injuries, or developmental processes, the substance of the adult organism is constantly undergoing renewal in the ordinary processes of metabolic activity. In former times the structural "mechanisms" by which physiological processes were believed to be accomplished were sharply distinguished from the material with which they reacted, just as the parts of such a mechanism as a steam engine are sharply distinguished from the fuel, air, water, and steam which pass through it. It was believed, for instance, that secreting and absorbing organs act like mechanical filters; that chemical processes such as oxidation, with its accompanying heat-production, occur only in the interstices of the permanent structure of the body; that the nervous system is a permanent structure comparable to a system of telegraph wires; and that in fact everywhere structure exists apart from function, just as a machine exists apart from its actual working. Experimental investigation has, however, gradually shown that this belief is devoid of foundation. Not only do all the more important metabolic activities occur within living cells, and not outside them, but these processes seem to be continually proceeding, during both activity and apparent rest, the distinction between rest and activity being only a relative one—a difference in degree and not in kind. Thus a living animal cell, whether during apparent rest or during activity, is continuously taking up oxygen and giving off carbonic acid; and if this process is suspended for even a short time the cell is rapidly disabled and its structure disorganised. It is also constantly taking up or giving off, or storing up within its substance, a variety of other substances, the number of which we have every reason to believe is very great, although only a few have been as yet completely identified. Such visible structure as can be made out in it varies according as one or another side of its metabolic activity becomes temporarily more predominant, as in the alternations of apparent rest and apparent activity; and to all appearances cell-structure is not an arrangement of fixed and permanent material comparable to the

parts of a machine, but only the form taken by a constant metabolism or flow of material. We cannot arrest the metabolism and preserve the structure intact.

All this evidence points very clearly to the conclusion that the assumption of structural mechanisms in living cells cannot be made a basis for explaining the peculiarities of ordinary cell-activity any more than it can be made a basis for explaining the phenomena of reproductive activity. In the case of ordinary physiological activity the difficulty for the mechanistic theory is perhaps not so striking and evident at first sight, but is nevertheless of the same nature as in the case of reproductive activity. We cannot make structure the ultimate basis of explaining function. In admitting this, however, we admit the bankruptcy of the mechanistic theory, and this being so we must endeavour to find some better theory.

We have already seen that the old vitalism was wholly unsatisfactory. The expression "vital force" represented no clear conception—no positive working hypothesis. In one respect only has vitalism justified itself—namely, as a protest against the physico-chemical theory of life; but it would evidently be a retrograde step to return to the old vitalism.

THE FUNDAMENTAL WORKING HYPOTHESIS OF BIOLOGY.

Many men of science have assumed that the only real explanations of biological phenomena must be mechanistic ones, and that to give up the attempt at physical and chemical explanation is to give up all attempts at explanation. The basis of this conclusion is the assumption that ultimate reality is physico-chemical reality, that the fundamental working hypotheses which have so brilliantly justified their use in the department of experience dealt with by physics and chemistry correspond accurately with ultimate reality. This assumption is, however, devoid of justification. The philosophical investigation of the last two centuries has very clearly shown that experience as a whole cannot be explained if it be assumed that matter and energy exist in reality just as they are provisionally assumed to exist in the sciences of physics and chemistry. Hence the fundamental conceptions of physics and chemistry have no higher status than that of other provisional working hypotheses, already known not to be capable of universal extension. It follows that there is no warrant for assuming that in biology the working hypotheses of physics and chemistry are the only possible ones. Biology is perfectly at liberty to make use of such working hypotheses as enable biological phenomena to be made as far as possible intelligible. It is not a general system of metaphysics that biology or any other branch of natural science directly aims at; and even if it were, nothing would be gained by attempting to square the facts of biology with a materialistic philosophical system long known to be impossible. For a full justification of this conclusion I should like to refer to Volume I. of my brother's recently published Gifford Lectures.*

I have been compelled, in defence of biology itself, to diverge for a moment from purely biological to general philosophical considerations, and I should like to take this opportunity of entering my very strong protest, as a man of science, against the practice on the part of many men of science of wholly ignoring the results of general philosophical investigation, and proceeding as if these investigations had never been made, or had never led to any results. Men of science are the first to point out the failings of so-called "practical" men, who for want of scientific knowledge are constantly attempting the impossible, or failing to take the means of doing what is obviously possible. In ignoring the results reached by the great philosophical thinkers, men of science are just as much to blame as is the manufacturer who ignores physics and chemistry; and a scientific education which ignores philosophy has precisely the same defects as a technical education which ignores science.

The question we have now to ask is, What fundamental working hypothesis best suits the practical needs of physiology and biology in general? In considering this question we must, if necessary, boldly brush aside the common preconceptions derived, as has just been pointed out, from obsolete metaphysics.

Biology deals with living organisms, and I have already endeavoured to show that all attempts to get beyond living organisms—to analyse the phenomena of life into terms of mere physical and chemical change—have resulted in a failure that leaves not the remotest hope of success. We must therefore go back to the facts of observation, and settle clearly what they lead us to believe that a living organism is.

In view of these facts, a living organism must, it seems to me, be defined as a being which manifests its existence in the active maintenance and reproduction of specific structure, or in the maintenance and reproduction of activity in specific form. Its characteristic details of

* *The Pathway to Reality*, by R. B. Haldane, 1903.

structure, qualitative and quantitative, are by this definition set down as the active expression of its existence, or as the form of activity in which its existence is expressed. Only by such a definition can we describe the characteristic autonomy of a living organism.

In the world as it is assumed to be in the sciences of physics and chemistry, matter and energy are regarded as two distinct forms of existence, the association together of which in any particular form or degree is accidental. The above definition of a living organism implies that in life the separation in thought of matter from energy must be regarded as unreal —that organic structure is identical with specific activity, and that whether we speak of the structure, or the physiological activity of an organism, we mean practically the same thing, since structure is only the specific form in which an organism actively manifests its being. The definition makes it clear that structure and activity in the physical sense are not the same as structure and activity in the biological sense. The morphological structure may persist, although from the physical standpoint the material of the living body is constantly changing; and physiological activity is not the mere flow of energy in the physical sense through a material structure.

If this definition be admitted the fundamental working hypothesis of biology must be that living organisms, as so defined, exist, just as the fundamental working hypothesis of physics is that matter and energy exist. We must also remember that the two working hypotheses must not be mixed up. Such terms as "living matter," or "molecules of protoplasm," can have no definite meaning. To those who insist that the living body can only be composed of atoms or molecules we must offer the reminder that atoms or molecules only represent a working hypothesis of limited application, and that we do not yet know what may be hidden behind these conceptions. We have now to see how the definition which has just been given of a living organism can be utilised as a fruitful working conception in physiology. Only by its utility can it be tested. There is no other real criterion.

It is evident that when we start from this definition our scientific aim must be to exhibit by observation and experiment each detail of organic structure or activity as a part of the organic whole, in which the nature of any living organism manifests itself. Starting with only the indefinite general conception that the organism is an organism, we have to gradually fill in the details by experimental investigation, and make our conception of it more and more definite. At first we are confronted by a confusing mass of observations of physical structure, chemical composition, movements, chemical changes, etc. These are the sensuous data which we have to investigate with the object of revealing their real interpretation. Our aim is to render them intelligible by sifting out what is accidental and irrelevant, and gradually discovering more and more fully their true interpretation as manifestations of an organic whole. Our ground conception, or fundamental working hypothesis, is evidently a teleological one; hence biological explanation can only be teleological explanation.

This ideal differs essentially from the mechanistic ideal, and seems, when we look back at the actual progress of biological investigation, to correspond far better with the direction which this progress has taken. It cannot be said that if we compare, for instance, the physiology of Descartes' physiological treatises, *De Homine* and *De Formatione Fœtus*, with the physiology of the present time, any progress can be traced towards the realisation of the mechanistic ideal which he so clearly put forward in these books. Indeed, the realisation seems infinitely further away now than it probably did then. The mechanistic physiology has further tended to set up an artificial barrier between anatomy and physiology by making structure the basis of explanation of function, and relegating questions relating to the formation of structure to a separate domain concerned with questions so difficult that they afford no hope of fruitful investigation. It is only quite recently that the development of experimental embryology has begun to break down this artificial barrier, the existence of which has been a great hindrance to biological advance.

The mechanistic ideal has also tended to discourage teleological investigation. The mechanistic physiology implies that the teleological regulation of the structure and functions of the body is merely accidental. Consequently investigations of this teleological regulation have been relegated to the back-ground. Much knowledge has been accumulated about the effects of this or that experimental procedure while the directly important question of how function is regulated teleologically under normal conditions has been relatively neglected. To take concrete instances, instead of an account of how secretion of urine, absorption from the intestines, or circulation of blood, is normally regulated as participating in the maintenance of the organism,

we are apt to find in current text-books elaborate discussions of the imaginary "mechanisms" of respiration, secretion, absorption and circulation—mechanisms which, if they exist, must act with blind disregard of organic unity, although they usually happen to act comformably to it.

When we look at the history of physiology, not from the standpoint of the mechanistic ideal, but from that of what may be called the biological ideal, which I have endeavoured to formulate, the progress which has been made appears continuous, if often one-sided owing to deflections produced by waves of misleading theory. It has been recognised from the earliest times that apart from any conscious volition an organism displays unmistakeable autonomy in maintaining its normal structure and physiological activities and so asserting its identity as a living organism. In face of injury or disease or disturbance of any kind, it tends to return to the normal. It regulates the breathing and the ingestion of food; its own growth; its temperature; its secretions and excretions, and other bodily functions. This self-assertion or autonomy has, of course, at various times been referred to the presence in the body of "vital spirits," the "soul" acting unconsciously, or "vital force," but as physiology has progressed, so has knowledge of organic autonomy steadily extended and become more precise, apart altogether from animistic, vitalistic, or mechanistic theories. The rise of comparative anatomy and physiology, and the discovery that organisms are related to one another by descent have further shown that the same structure and activity as is manifested in the lives of organisms of one species can be traced also in the lives of organisms of other species. The evidence of progress seems quite inconclusive so long as it is assumed that the question for physiology is: by what mechanisms or what interference of "vital force" is the appearance of teleological regulation in the physical and chemical processes occurring in organisms produced? But if a living organism is taken to be a living organism and nothing else, the question becomes: in what manner do living organisms manifest their being and identity? And to this last question physiological investigation is giving a more and more complete answer with every succeeding year. New details of process and structure are constantly being discovered on the one hand, while, on the other, experiment and observation are constantly showing how in these details organisms are expressing and preserving their own identity.

It is of course impossible to undertake in the course of two lectures any detailed survey of the different departments of physiology; but I propose in my next lecture to indicate in outline the lines of advance along which it seems to me that progress in each department has occurred and further progress may be looked for.

(To be continued in the next issue.)

Papers by Guy's Men.

A Case of Picric Acid Poisoning, followed by Severe Constitutional Symptoms. By Dr. E. C. Bevers.—*The Lancet*, April 28th, 1906.

Removal of the Right Lobe of the Thyroid. By W. H. Jalland, F.R.C.S.—*British Medical Journal*, April 28th, 1906.

On the Relationship between Graves' Disease and Acute Rheumatism. By W. E. Robinson, M.B., B.Ch. Oxon.—*Ibid.*, April 14th, 1906.

Pneumococcic Arthritis. By W. B. Secretan, M.B., F.R.C.S. Eng., and William Wrangham, M.D.—*Ibid.*, April 21st, 1906.

The Oliver-Sharpey Lectures on the Bearing of Metabolism Experiments upon the Treatment of Some Diseases. By E. Ivens Spriggs, M.D., F.R.C.P.—*The Lancet*, April 28th, 1906. Lecture I.

Some Recent Observations on Diseases of Children: A Review. By George F. Still, M.A., M.D. (Cantab.), F.R.C.P.—*The Practitioner* for May, 1906.

A Clinical Lecture on Some Cases of Enlarged Glands. By W. Hale White, M.D., F.R.C.P.—*The Clinical Journal*, April 25th, 1906.

On Cataract Disease in British Guiana. By A. Wylie, M.A., M.B., B.C. (Cantab.), M.R.C.S., L.R.C.P.—*British Guiana Medical Annual* for 1905.

Observations upon Two Cases of Cheyne Stokes' Respiration. By Drs. M. S. Pembrey, A. P. Beddard, and H. French.—*The Journal of Physiology*, March, 1906.

Invisible Surgery. By J. L. A. Aymard, M.R.C.S., L.R.C.P. Lond. Illustrated.—*The Lancet*, 12th May, 1906.

Three Cases of Myeloid Leukæmia. By H. J. Campbell, M.D. Lond., F.R.C.P.—*Ibid.*

The Vaccine Treatment of Pyorrhœa Alveolaris. By Kenneth W. Goadby, D.P.H., L.R.C.P., M.R.C.S., L.D.S. Eng.—*Transactions of the Odontological Society* for March, 1906.

Two Unusual Cases of Difficult Labour. By H. T. Hicks, F.R.C.S. Eng.—*The Lancet*, 12th May, 1906.

A Paper on the Pathogeny of Diabetes. Read before the Section of Medicine at the Fifteenth International Congress of Medicine at Lisbon, April 19th to 26th, 1906. By F. W. Pavy, M.D. Lond., LL.D., F.R.S.—*The Lancet*, 5th May, 1906.

Obituary.

John Henry Bryant, M.D., F.R.C.P.

JOHN HENRY BRYANT was born at Ilminster, Somerset, on June 4th, 1867, and was the son of the late William Mead Bryant and Mrs. Bryant, of Ilminster. He was educated at Ilminster Grammar School, and at Sherborne School, where his name is inscribed on the roll of honour. After passing his London University Matriculation Examination, he entered Guy's in October, 1886, as a Preliminary Scientific student. At Guy's he had a most distinguished career as a student, taking prizes in the first, second, third and fourth years, the Michael Harris Prize for Anatomy in 1888, and the Beaney Prize for Pathology in 1891. He was *proxime accessit* for the Treasurer's Gold Medal in Medicine in 1890, and in the following year took both the Medicine and Surgery Medals.

He graduated M.B., B.S. Lond. in 1890, after first taking the M.R.C.S., L.R.C.P. At the M.B. Examination he took first-class Honours and the Gold Medal in Medicine, and first-class Honours in Forensic Medicine. He took the M.D. degree in 1891, and in 1895 the diploma M.R.C.P. Lond., and was finally elected a Fellow of the Royal College of Physicians in 1901.

He held the post of House-Physician at Guy's to Dr. Goodhart, and was also Obstetric Resident. Immediately he finished his house-physiciancy in 1891, he was appointed Medical Registrar, and held this appointment until December, 1898, when he was appointed Assistant Physician to the hospital. In the following year he became Demonstrator of Morbid Anatomy, and also Physician to the Electrical Department, and in 1903 was elected to the Lectureship on Materia Medica.

He was married in 1900 to Stella Beatrice, sixth daughter of the late R. H. Fry, of Grecian Villa, Norwood, who bore him three children.

By Dr. Bryant's unexpected and untimely death, Guy's loses one of its most able young physicians, and in the opinion of those who knew him well, London loses one who would have been a great consultant. His great ability and powers of discrimination had already won him a much larger share of consulting work than usually falls to the lot of the young physician. It was known that his health had been failing for at least six months, necessitating complete rest from work, but when the news of his death arrived on Monday, May 21st, the shock was all the greater, because there had previously been some hope expressed that improvement was taking place. It is not too much to say that his death will be sincerely regretted and deplored by Guy's men and others throughout the world, for no man of the present time enjoyed so great a measure of personal popularity and friendship, and deservedly so, as Dr. Bryant did.

Professionally, Dr. Bryant was before all things a great teacher. His systematic method of arranging clinical work appealed enormously to students, and his success and popularity as Medical Registrar were in great measure due to his methods of teaching. During the seven years he held this appointment he got through an enormous amount of work, both in the wards, in class work and in private coaching. Everything he did then and at all times was characterised by extreme care and painstaking labour. Every lecture he gave was written out beforehand, and so carefully prepared that no point, however small escaped him, and so nothing was left to the imagination of the student. This must have been the secret of his great success as a teacher, combined with the happy gift, which is not given to all, of ability to impart his knowledge to others.

As a physician the same care and thoroughness characterised his work in all departments. In the investigation of cases his systematic method of examination enabled him often to come to definite conclusions when haphazard work would have signally failed. His knowledge of the world, too, was not the least of his assets as a consulting physician, enabling him at all times to take a human interest in his patients, quite apart from their professional aspect. It was no doubt this trait in his character which so endeared him to his patients, for although a man of few words, he had a large fund of sympathy which showed itself in many small unostentatious ways, and was all the more appreciated.

As a man, Bryant was universally beloved, and among living Guy's men it would be difficult or impossible to find another who had such a large circle of real friends. In such a man it was not surprising to find a straightforward disposition that always prompted him to oppose underhand dealing in any form, and often to speak freely what he felt, perhaps occasionally to his own detriment. In sports Bryant excelled at Rugby football, and men who played from 1886 to about 1895 will remember him as a fine half-back, doing yeoman service for Guy's and playing also for Surrey County and Richmond. He was a most sturdy and powerful player, tackling in a determined manner and giving and receiving hard knocks with a cheery smile that may be equalled but never excelled. In addition to Rugby football he took a great interest in athletics, and was himself no mean sprinter on his day. Of late years he invariably took a keen interest in Hospital athletics, and officiated as one of the judges at the Annual Sports.

His funeral took place at Ilminster on Saturday, May 26th, in the presence of members of his family and a few of his old friends, including members of the Guy's Staff. Those of us who stood by his grave in the beautiful little cemetery at Ilminster, in the midst of the country he loved so well, could not but feel that we had lost the best of friends, whose place we and Guy's Hospital would find it hard to fill.

Dr. Bryant contributed many papers to the literature of medicine, among the most important of which are his article on "Electro-therapeutics," in Hale White's textbook of Therapeutics, and "Diseases of the Abdominal Blood-vessels," Allchin's System of Medicine. To the

Guy's Reports, of which he had been for some years editor, he contributed papers on "Hyperpyrexia," "Suppurative Pylephlebitis," "On the Production of Gas-containing Cavities in the Viscera," "Functional Pulmonary Regurgitation," "Acute Intestinal Obstruction caused by the Ileum becoming adherent to a Lithopedion," "Calcification of the Arteries in a child aged six months," and other papers of interest to various medical journals.

A Personal Appreciation.

"Rosie," man and scholar, is dead, a victim to overwork. And so many, many others could have better been spared. Bryant's death will be deeply felt far beyond the limits of Guy's, for in whatever he did, right or wrong—there was very little of the latter—he was always an honest, upright gentleman. He was an extremely strong man, and like all strong men, once convinced that he was right, he was an outspoken enemy and a self-sacrificing friend—a thorough man, such a one as is rarely met with, and withal sensitive to a degree, feeling slights and unkindness far more than he would allow even his most intimate friends to see. It was enough for Bryant to think a thing unjust, to see the weakest going to the wall, to imagine an abuse of power, he was off coat and at it hammer and tongs. If he thought ill of anyone, his was too impetuous and honest a nature not to say so—not behind a man's back, but to his face. Such a character as this has made Englishmen what they are all over the world, but it does not make for peace of mind in the uphill struggle entailed in building up a big West-end consulting practice.

I have known "Rosie" for just on twenty years, and during all that time I do not believe he ever took a really proper holiday. He was a long way the best man of my year (1886), and just when success seemed to be at hand—just when he had reached the brow of the hill, the long years of unselfish toil and strenuous struggle ended in a complete break-down and death. One likes to think that dear old "Rosie" has now found that peace which, at all events for him, this world could not give.

He was in his time one of the best half-backs to be found on any London football field, and in every way a thorough sportsman, using the word in its best sense.

He keenly appreciated the beautiful in old furniture and art—and indeed was in every way a delightful companion and a genuine friend.

He was always doing little—and sometimes very big—kindnesses, often far beyond his means, and he was essentially a man who never let his left hand know what his right hand was doing in charity.

With the death of dear old "Rosie," a void has been created in the life of the writer, which can never be filled. R.I.P. old boy. G. S.

It is hard for those of us who really knew poor Bryant to keep a tinge of cynicism out of our sorrow. Here was a man with splendid physique, with the redundant health that alone can make the really first-class Rugby half, with that keen enjoyment of life that comes only with perfect health; and in a few short years he has gone, broken in the service of the great temple of health. Is it cynical to ask whether the temple of health has been converted into a pathological mill? Perhaps it is; but there have been a sad number of accidents on the pathological side these last twenty years.

It is pleasantest to think of Bryant in his own bright West country before he really went into the mill; what delight he found in a night after the badger, up among the Norton hills; or a day after his beloved trout, and how many miles would he not go to take a brace to a friend. How delightful he was with children, with animals; and from all this he came, enthusiastic, to the great temple of health; P.M.'s on the hot summer afternoons; Out-patients in the gloom of winter fogs; pathological reports at midnight.

But nature silences cynicism, she draws a final and always a merciful line at the end of every man's account; his profits cease, but he is no more exposed to loss; the loss is ours; but there is great consolation in knowing that if Bryant did not win his deserts, there is

"——rest for the weary sleeper,
Peace to the quiet dead." S. N. McI.

An Old Clerk's Tribute.

As a teacher, Dr. Bryant was sound and sure. There was nothing wildly exciting in his way of teaching. He would not hold the ear of anyone who was disinclined to listen to him. His way of speaking was not such that it inevitably kept one awake on a hot day down at Out-patients; yet we always came away feeling that we had learnt something. What he told was clearly explained, it covered the ground of the subject he was then speaking about, while he did not go off into side-paths and anecdotes. There are two classes of clinical teachers, those who teach in a delightfully anecdotal way, telling some little story, then another, repeating what some of the giants of old used to say, each part bearing on the point, while each seems to be a thing by itself; and those who take the subject, go straight through it and never leave it till the end. Each style of teaching has its uses, and when we have sat at the feet of one of the first class, it gives a stimulus to the poor student who has so much to learn to go to one of the other for a time. Dr. Bryant was an example of the second class of clinical teachers, and as such many of us will be thankful for what he has taught us.

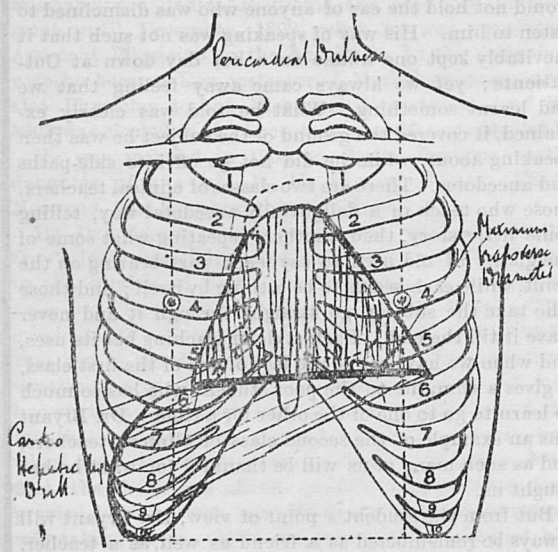
But from the student's point of view, Dr. Bryant will always be remembered as a friend as well as a teacher. A good sportsman himself, he was keen on every kind of sport, encouraged men to play, took an interest in how each man got on. Further, he was always willing to help a man in any difficulty. Things that to us seem of such moment, to others appear very small; yet he would listen with attentive ear, and was always ready to give his advice on any small matter that any one should ask him.

Occult Suppuration.

IT is a truism to remark that more skill is required to detect common diseases in strange garb than is needed to recognise and correctly label rare conditions. When confronted by apparently conflicting and anomalous symptoms and signs, one may be forced to discard certain data and construct a diagnosis out of the apparently more prominent points of the case. Unfortunately such a procedure is not always successful, but by going over the case backwards, with the help of the key supplied by the autopsy, we may recognise the reason why we went astray, and not unfrequently we shall find that a mistaken diagnosis owed its inception to the reposing of too great a confidence in some obtrusive feature of the case. So that in dealing with complex cases it is not at all a bad plan, after a diagnosis has been arrived at out of the more "salient features," to construct an alternative diagnosis from the fragments that remain.

Perhaps I can illustrate and emphasise my point by reference to one or two cases: —

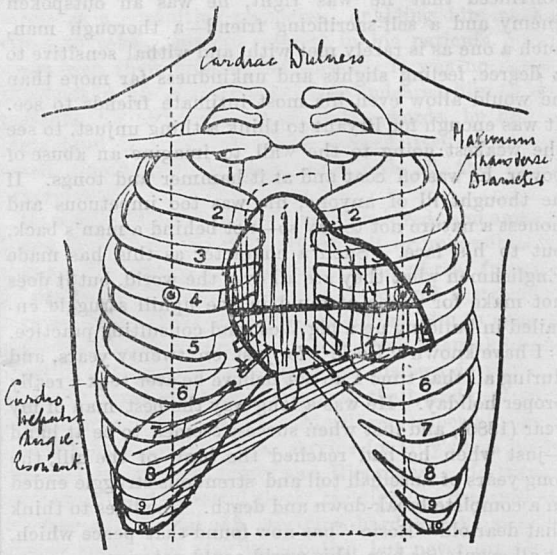
CASE I.—An old man was suddenly seized with acute abdominal pain which was not definitely localised. He was sick once soon after, and was constipated. When seen four days after the onset he was obviously very ill. Temperature 101, pulse 96. The abdomen was markedly and irregularly distended. The upper part of the abdominal wall was rigid, and the diaphragm moved but



little on respiration. Signs at both bases and dislocation of the heart upwards suggested compression by the distended intestines. Guided by the tympanites, a diagnosis of volvulus was made. An exploratory laparotomy revealed a very distended colon, and no obstruction being found, a left inguinal colotomy was performed. At the post-mortem the appendix was discovered perforated; there was very little local reaction in the right iliac fossa and no peritonitis. There was, however, a subdiaphragmatic abscess containing $\bar{3}$x. of pus. Its position was just to the right of the falciform ligament; it did not approach to the margin of the ribs, nor was it large enough to push the liver down. Recent pleurisy by direct extension from below accounted for the physical signs of both bases.

In this case, had the tympanites for a moment been relegated to the background, it is not improbable that an approximately correct diagnosis might have been entertained, based on the history, diaphragmatic stasis and bilateral lung signs.

CASE II.—A man, aged 44, emphysematous and a chronic bronchitic, was admitted for pain in the right side of his chest. His history was that three days ago he had a sudden pain in the right side of his chest, made worse by coughing; he was able to continue at work for a day. Admitted on the fourth day of his illness, his



temperature was 97·8, pulse 120, respiration 32. His posture was one of complete orthopnœa, and he had the expiratory dyspnœa of the asthmatic, and was considerably cyanosed. The heart seemed to be a little dilated, the transverse dulness being 6 inches in extent in the fifth intercostal space, 2½ inches to the right and 3½ inches to the left of the mid sternal line. There was a slight systolic bruit at the impulse and the heart was irregular. No rub heard. He was much troubled by his cough, and temperature at nights went up to 101°F. The diagnosis made was bronchitis and emphysema, and probably some deep-seated pneumonia. Subsequently he became dull at the left base behind T.V.F. was diminished and the entry impaired. The transverse cardiac diameter had increased to 8 inches, and was maximum in the sixth space. The vertical dulness was not increased above the third rib. He now complained of tightness round the chest and the pulse was quick and irregular. The day before death the pulse was

absent at the wrist during inspiration—the so-called paradoxical pulse.

Post-mortem. The pericardium was much thickened, adherent to the pleuræ, and contained Oii. of pus. The heart was enlarged and somewhat fatty. Bronchitis and emphysema well marked, the bronchial glands were suppurating and there was a little indurative mediastinitis.

The reason for going wrong in the diagnosis of this case depended upon the fact that the man was a chronic bronchitic; for it seemed reasonable to attribute his cardiac failure and enlarged heart to an exacerbation of the bronchitis. In all probability he had an attack of lobar pneumonia which aborted, to which the pericarditis was secondary, and the large effusion compressed the left lung. The effusion was very gradual, and produced no bulging anteriorly, not even in the epigastric angle. The real clue to pericardial effusion was the fact that the transverse cardiac dulness was greatest at its lowest point. Balfour, in his "Clinical Lectures on Diseases of the Heart," says: "Increased dulness in the cardiac area may depend upon the presence of fluid in the pericardium, and in this case the dulness is pyramidal with the base downwards. Or the increased dulness may depend upon enlargement of the heart itself; in this case the pyramidal shape of the dulness is less marked, but the broadest part is *always* above." The reason the vertical cardiac dulness was not increased in the above case was due to its being masked by the emphysematous upper left lobe, and partly, perhaps, to the superior mediastinitis, which would hinder the dilatation of the upper part of the pericardial sac.

In the comments on these cases I plead guilty to exhibiting wisdom after the event, and also to neglecting George Eliot's advice: "Let the wise be warned against too great readiness of explanation; it multiplies the sources of mistake, lengthening the sum for reckoners sure to go wrong."

The appended figures illustrate the difference between "pericardial" and cardiac dulness.

H.F.B.W.

Papers by Guy's Men.

The Oliver-Sharpey Lectures on the Bearing of Metabolism Experiments upon the Treatment of Some Diseases. By E. Ivens Spriggs, M.D. Lond., F.R.C.P. Lond.—*The Lancet*, 5th May, 1906. Lecture II.

Note on an Investigation into the Blood in Cases of Tubercular Disease and Malta Fever. By Captain J. C. B. Statham, R.A.M.C.—*The Journal of the Royal Army Medical Corps* for May, 1906.

Hypertrophy and Dilatation of the Heart in a Child without Valvular Disease or General Adhesion of the Pericardium. By George Carpenter, M.D. Lond., M.R.C.P. Lond., and Theodore Fisher, M.D. Lond., M.R.C.P. Lond.—*The Lancet*, May 19th, 1906.

The Wills Library.

THE Library Committee, at its last meeting, considered a report by the Librarian on the advisability of increasing the number of copies of certain text-books which were in constant demand. While recognising that it is most desirable that every student's personal library should contain a standard text-book on each important subject, it was agreed that every opportunity should be given to a student to consult, whilst in the Hospital, alternative text-books, in addition to those which he constantly reads. In the case of the weightier volumes which a student might possess, it would not be convenient for him to carry them to and from the Hospital. It was therefore resolved to purchase additional copies of some half-dozen of the more expensive text-books for which the Librarian reported there was a greater demand than could be met by the present supply. The Librarian was asked to watch the result of the experiment with a view to asking the Committee to extend the principle if it was found to be an advantage to the readers. As a result of the thorough overhauling of the contents of the Library, which took place on its transfer to its new quarters, a considerable number of surplus and useless books have been set aside. From time to time, in the past, surplus books have been listed, priced at a merely nominal figure, and offered for sale to members of the Staff and students. The remnants of these periodic sales, which now occupy the unfurnished room between the Wills Library and the Gordon Museum, were inspected and ordered to be disposed of, it being understood that this room would shortly be required for some more useful purpose.

The following books were ordered to be purchased:—

Osler's Medicine, Taylor's Medicine, Rose & Carless' Surgery, Walsham's Surgery, Stewart's Physiology, Cunningham's Practical Anatomy, Haab's Operative Ophthalmology, Sedgwick's Text-book of Zoology, 2 vols., Hart & Barbour's Gynæcology, Delamere, Poirier, & Cuneo on the Lymphatics, Kirk's Operative Dentistry.

The following presentations were received:—

By the Publishers.

Baillière, Tindall & Cox.—Busch's Laboratory Manual of Physiology, Giles' Gynæcological Diagnosis, Jones' D.P.H. Examination Questions, Carson's Aids to Surgical Diagnosis, Dental Annual and Directory, May & Worth's Diseases of the Eye.

Bale, Sons, and Danielsson.—Hutchinson's Patent Foods and Medicines, Pearson's Modern Surgical Technique.

J. & A. Churchill.—Whittaker's Essentials of Surface Anatomy, Box & Eccles' Clinically-Applied Anatomy, Rational Organotherapy.

John Currie.—Buchanan's Surgery.

H. Kimpton.—Colbeck & Chaplin's Prescribing.

Scientific Press.—Woollacott's Nursing of Infectious Diseases, Loane's Midwifery.

Wright & Co.—Berry's Prevention of Infectious Diseases, Warwick & Tunstall's First Aid to the Injured and Sick.

By the Author.—Pearson's Modern Surgical Technique, Pavy's Carbohydrate Metabolism and Diabetes.

Guy's Hospital Medical School.—Collected Papers from Physiological Laboratory, 1900—1904.

Government of India.—Scientific Memoirs.—No. 21.—On the Standardisation of Anti-Typhoid Vaccine.—No. 22.—Mediterranean Fever in India, Isolation of Micrococcus Meletensis.

By Sir Thomas Stevens.—Sternberg's Bacteriology, Salkowski's & Leube's Vom Harm, Allen's Chemistry of Urine, Cooke's Chemical Physics, Blyth's Public Health, Oliver's Lead Poisoning, Lauder Brunton's Disorders of Digestion, Letheby's Food, Fayle's The Spitalfields Genius, Gosse's Sir Thomas Browne, Funke's Atlas der Physiologischen Chemie, Rieder & Delepine's Atlas of Urinary Sediment, Mendelèeff's Chemistry, 2 vols., Jörgensen's Micro-Organisms and Fermentation, Bunge's Physiological and Pathological Chemistry, Perkin & Lean's Chemistry, Hammersten's Physiological Chemistry, Wyld's The Inspection of Meat, Poore's Rural Hygiene, Thompson's (Sir Henry) Food and Feeding, Lafar's Technical Mycology.

Guy's Hospital Ladies' Association.

THE Eleventh Annual General Meeting was held in the Court Room, on May 22nd. The Countess of Bective took the chair, and amongst the large number of members present were:—Mrs. Cosmo Bonsor, Mrs. Frances Lucas, Mrs. Merry, the Countess of Selkirk, Mrs. Frederick Taylor, Mrs. Pye-Smith, Mrs. Hale White.

The Countess of Bective, in opening the proceedings, referred sympathetically to the death of Mrs. Davies-Colley, one of the Association's earliest supporters, and then said:—

I beg, as your chairman to-day, to welcome here all representatives of branches, and all friends of Guy's, and to offer you the renewed thanks of your committee for the generous support which has been of such increasing service during the eleven years' existence of the Ladies' Association. We cannot over-estimate the value of this Association when we realise that these past ten years have seen the number of in-patients in Guy's Hospital increase from about 6,000 to nearly 9,000, and the out-patients from 95,000 to over 135,000. The rapidly-growing claims on our Ladies' Association, which these figures represent, make us ask you for increased support, *not* in your own work, or your own contributions, for in these we feel our indebtedness to all our branches more and more every year, but for the support of your co-operation in making this Association known in a more extended manner. We ask this with the twofold object of adding members to already existing branches, and of forming new branches in districts hitherto unacquainted with this Association, thus extending the area of what may indeed be called part of a national work. It hardly seems necessary to allude to the many schemes of usefulness undertaken by this Association, but perhaps I may mention the ones which we particularly wish to have *more widely known*, such as the great need of garments for convalescents going into Homes and sea-side places, where certain necessaries are obligatory. Then the ever-recurring want of children's garments in the wards to replace what has been perforce destroyed when they entered Guy's, to say nothing of the urgent needs of those poor mites who come in with hardly a rag on them and the little babies who are born here. Boys' and men's clothes are also urgently needed. All these calls upon you are very heavy, I know, and they increase from year to year, even as Guy's increases its magnificent work. But I do not fear that the generosity of this Association will shrink from the prospect of added calls, or even from our never-ending appeals! The society is indispensable to Guy's, which is at once an incentive and a matter of great pride to us all. It is also an admirably-managed organisation, having developed steadily during its eleven years of existence, and reflecting the greatest possible credit upon its executive, and especially on its secretary, Mrs. Lauriston Shaw. I feel, therefore, no hesitation in asking you to use all your influence in making your Association more widely known. Mrs. Shaw has especially asked me to suggest to you the importance of bringing friends to see the hospital on these annual meeting days, when the conditions and huge requirements of this institution can be better estimated than by reports, and when (as has already happened several times) people's interest has been aroused to the extent of forming some of our most valued branches. One more point I am asked to lay before you—it is that of our kind lady visitors. During the past few years we have been deprived by death and by change of some whom it will not be easy to replace, and we are therefore doubly anxious to secure the help of ladies whose sympathy and kindliness may induce them to take up this branch of our Association's work, and I may assure them that the secretary of the Association and Matron of the hospital will endeavour to make the tax on their time as easy as possible. Ladies and gentlemen, I know I have not had anything of either particular importance or of sensational interest to lay before you, and so it has been doubly kind of you to listen so patiently, but the point I would ask you very urgently to take home with you and to consider most carefully is the one of additional branches, for it is of unspeakable importance to Guy's.

The adoption of the report was moved by Mrs. Cosmo Bonsor and seconded by Miss Swift, the Matron, who referred to the immense benefits the Association conferred on the Hospital. A grant of £200, to support four beds in the Maternity ward, was agreed to, and in addition the newly-formed Children's Branch subscribes £6 11s. towards the support of a cot. Mrs. Frederick

Taylor and Mrs. Rudolph Hankey were chosen to fill the vacancies on the Committee, and Mrs. Layton was the elected representative of the local secretaries.

After the meeting the work contributed during the year was inspected, and many members took the opportunity of going over the Hospital and Nurses' Home.

The Goblins.

ON Thursday, May 3rd, the Café Royal was honoured by a visit from the Goblins. Mr. Putty Henry had previously explained to the manager, in his usual secretarial capacity, that his intruding visitors represented the galaxy of budding Guy's talent in those *anni mirabiles*, 1891–2. Mr. W. I. Hancock took the chair, and the *hors d'œuvre* punctually at 7.52, supported by brother Dubby from Zomerzet, Tiffey Clarke from Morley, Leeds, and Montey Way, next year's president, from Southsea. Dr. Ivens Spriggs, Mr. R. P. Rowlands and Master Tommy Hicks, were nominated respectively Consulting Physician, Surgeon and Obstetrician to the Club, on account of recent distinctions; their health was drunk with acclamation, and Master Hicks, amongst others, gurgled a reply. Captain Hardy represented the Services, and behaved in exemplary fashion, his noble features justly embodying the virtues of his exalted rank. The suburbs sent a deputation consisting of Messrs. Balderston, Fuller, Hills and Lindsay; Mr. Gough had left his Compton Martin for the evening, Mr. Picnot his Rochester; Ticehurst with pain spared Mr. J. B. Walters, and Havant Mr. Levick. Mr. Pearson hacked up from Buckingham, and Mr. Cardin had presumably motored in from Essex. Mr. Fremantle, this time from London, reqresented Drains at the feast. Wires poured in from all parts of the world, and the President was fully justified in his cordial congratulations to the Club on the happy evening spent and on its sturdy health, both largely due to the generous exertions of its genial and kindly secretary. A physician and a hygienist gave vent to song, and an eventful day thus ended for the Café Royal and the Goblins' Club.

Appointments.

Dr. F. SHUFFLEBOTHAM has been placed upon the Commission of the Peace for the Borough of Newcastle-under-Lyme.—*Lancet.*

Civil.

HARDY, G. FRANK, M.R.C.S. Eng., L.R.C.P., has been appointed Senior House Surgeon at the Scarborough Hospital.

HODGSON, HAROLD, M.B., B.S. Lond, has been appointed District Medical Officer of the Alresford Union.

MOISER, B., M.B. Lond., M.R.C.S., L.R.C.P., has been appointed to the West African Medical Staff.

RICHARDS, OWEN W., M.Ch., F.R.C.S. Eng., has been appointed Surgeon to the Kasr el Ainy Hospital, Cairo, and Professor of Clinical Surgery in the Egyptian Government School of Medicine.

RICHMOND, B. A., M.B., B.S. Lond., has been appointed District Medical Officer of the Bermondsey Parish.

SCOTT, ERIC N., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Orawata, Korumbarra and Jumbunna Ridings, Victoria, Australia.

TELLING, W. H. MAXWELL, M.D., B.S. Lond., M.R.C.P. Lond., has been appointed Clinical Lecturer in Medicine to the University of Leeds.

Naval and Military.

Fleet Surgeon WALTER J. BEARBLOCK, R.N., has been appointed to the *Challenger*, Staff Surgeon ARTHUR E. KELSEY, M.B., R.N., to the *Trafalgar*, and Staff Surgeon RICHARD F. CLARK, R.N., to Haslar Hospital. Staff Surgeon PERCIVAL M. MAY, R.N., has been appointed to the *President*, additional, for a three months' hospital course.

Lieutenant H. V. BAGSHAWE, R.A.M.C., is promoted to be Captain, Lieutenant F. M. M. OMMANNEY, R.A.M.C., from the Seconded List, to be Lieutenant.

Major P. HEHIR, I.M.S., is promoted to be Lieutenant Colonel.

Change of Address.

Lieutenant Brooke Churchill, R.A.M.C., from Aldershot to Lucknow, India.

Captain W. J. S. Harvey, R.A.M.C., from Chester to Brecon.

Captain H. C. Keates, M.B., B.S., I.M.S., from Kohat to Fort Lockhart, Samana, North West Frontier Province, India.

Mr. H. E. Marsh, L.D.S., from Guy's Hospital to High West Street, Dorchester.

Dr. H. J. Milbank-Smith, from Broadwater Villa, Broadwater Road, Worthing, to Worthing Lodge, Worthing.

Dr. B. G. Neale, from Heath End House, Cromhall, Gloucestershire, to Brook House, Uffculme, Devon.

Dr. Hugh Parrot, from 29, South Side, Clapham Common, to 100, South Side, Clapham Common, S.W.

Mr. W. S. Pierrepont, L.D.S., from Guy's Hospital, to 2, Cockspur Street, Pall Mall, S.W.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Concerning Three Cases of Carcinoma of the Body of the Uterus in the Gynaecological Wards.

By H. T. HICKS, F.R.C.S.

CASE 1.—Aged 49; no children. Had attacks of hæmorrhage for about a year. Menopause two years ago. There had been no pain, but patient was wasted, and the last two attacks of hæmorrhage had been severe; the patient was, therefore, profoundly anæmic. On examination the uterus was enlarged, but soft; on either side could be felt two movable rounded swellings, which were thought to be enlarged ovaries. The cervix was undilated. There was no ascitis. With a blunt curette, passed into the uterine cavity, a few small pieces of endometrium were obtained; these were examined and found to be malignant. Dr. Horrocks removed the uterus and ovaries by abdominal pan-hysterectomy. The uterine mucous membrane was the seat of a superficial pedunculated carcinoma, and the ovarian tumours were composed of numerous bud-like cysts, attached to a central core of growth. Sections taken from the uterine body and the ovaries showed the growth to be an adeno-carcinoma. The patient unfortunately died in a profound state of anæmia eleven days after operation. No secondary growths were found at the autopsy.

CASE 2.—Aged 63; fat woman; four children. During the last two years there have been several attacks of hæmorrhage, but not severe. Beyond this the patient had suffered a little pain in the sacral region, and there had been some discharge. On examination very little could be made out from the vagina, because this organ and the cervix were atrophied. When the vagina is atrophied, the vault becomes greatly diminished, and the arch formed is more of a Gothic type in comparison with the capacious Norman arch of a functional vagina; and further, rigid atrophy-strings roof over the vaginal vault and thus make it difficult to palpate small tumours above the pelvic floor. It is, therefore, best to examine from the rectum. In this case a soft uterine swelling, about the size of a small orange, could be made out. The cervix was closed and would not admit a probe. Dr. Horrocks snipped open the cervix, and about an ounce of pus came away. A blunt curette brought out two or three small bits of endometrium, which, on microscopical examination, proved to be malignant. Abdominal pan-hysterectomy was performed by Dr. Horrocks, but the patient sank on the third night. At the autopsy no secondary deposits were found. The left kidney was completely atrophied, the result of old calculous nephritis. The urine, during life, showed no signs of this kidney trouble by the ordinary clinical methods of examination. There was considerable peritonitis.

CASE 3.—Aged 61; had suffered from slight attacks of hæmorrhage and pain in the sacral region. She had wasted during the last three or four months. Had never borne children. On examination, the uterus was enlarged up to a point midway between the umbilicus and pubis. It was hard and rounded, giving the impression of a hard fibro-myoma. On each side could be felt two rounded masses, about the size of Tangerine oranges. A curette brought away a little growth which proved to be malignant. Mr. Bellingham Smith removed the uterus and ovaries by abdominal section. The patient made a good recovery.

These three cases are fairly typical examples of carcinoma of the body, each presenting some interesting special points. The histories show that the bleeding had occurred in attacks during one to two years. This long period of symptoms is by no means uncommon. I saw a case of carcinoma of the body which bled on and off for three years, and the growth was still confined within the limits of the uterine muscle and was therefore operable. Thus we find that in carcinoma of the body the symptoms may have existed for a considerable time and the case still be operable; whereas in carcinoma of the cervix an operation at that stage would be probably hopeless.

The next point to note is the question of childbearing. It is a well-known fact that carcinoma rarely attacks the cervix of sterile women, whereas carcinoma of the body frequently occurs in nullipara. One of the above cases had borne four children, but the other two were married sterile women. There are of course exceptions, and one must not neglect to look for a malignant growth in the uterine body of a parous woman any more than one should in the cervix of a nullipi.

Perhaps the most difficult part of the management of cases of carcinoma of the body is the diagnosis. The growth lies hidden within the body of the uterus which may or may not be enlarged; the cervix is closed. The symptoms are as a rule slight, pain is by no means a constant sign. Hæmorrhage is the most reliable symptom, and the blood may be more or less watery in consistence. Foul watery discharge is frequently present. When a woman has passed the menopause, and then, after a clear interval, begins to suffer from irregular hæmorrhages or a watery, blood-stained discharge, one may almost be sure that some new growth is causing the symptoms. A submucous fibro-myoma or polypus may be suspected, but if there has been no menorrhagia, and if there has been a clear interval between the menopause and the onset of the bleeding, a fibro-myoma would rarely be found, unless it had become sarcomatous.

Another cause of a foul blood-stained watery discharge is said to be "senile endometritis." I do not think that the pathological evidence that there is such a disease as senile endometritis is at all conclusive. One can neglect the possibility of this condition completely. If an old woman is suffering from a blood-stained discharge, coming from the uterine cavity, one can almost safely say that she has malignant disease either of the uterine body, the Fallopian tubes, or the ovaries. Senile endometritis ought to be deleted from all text-books as being

a term which, clinically, may lead to serious mistakes in diagnosis, and one should always neglect it as a cause of hæmorrhage.

It is impossible to diagnose many cases of early carcinoma by ordinary symptomatic and bimanual means, and it is necessary to go further and explore the interior of the uterus.

Dilatation of the cervix, sufficient to admit the finger is rarely required, and is indeed both dangerous and difficult in a senile cervix. If the finger must be introduced into the uterus to feel for the cause of the hæmorrhage, it is far better to split the uterus in front, after separating the bladder. As a rule, the simple method of inserting a blunt malleable wire curette will give all the information required, and this instrument can be generally used without previous dilatation. Where the os will admit a narrow wire snare, there is no need to give the patient an anæsthetic, which is a matter of great importance, especially in an old woman.

If there is much hæmorrhage, and if the curettings appear whitish-opaque in colour and are friable, compared to the somewhat gelatinous transparent appearance of innocent curettings, one may be able to make a definite diagnosis, but it is best to harden the pieces at once in alcohol for three or four hours, clear in zylol for ten minutes, embed in paraffin for a few hours, and then cut and stain; one can get the section through in under twenty-four hours by this method, and it is more certain than cutting the section at once by freezing.

The above three cases were suffering from malignant adenoma, and I think this type of growth is more common than the columnar-celled carcinoma, growing in solid columns and originating in the superficial endometrium.

Not long ago Dr. Horrocks explored the uterus of an old lady in private. The tiny bits of curettings appeared on examination under the microscope to be a spheroidal-celled carcinoma. These curettings came from a little patch of growth in the interior of the uterus, about an eighth of an inch square. The left Fallopian tube was the seat of a primary carcinoma, and the patch on the endometrium a secondary growth. In this case Dr. Horrocks performed abdominal pan-hysterectomy and removed the tubes as well. The patient made a good recovery.

A malleable narrow wire snare, which can be bent to any angle, is a most valuable instrument for obtaining pieces of endometrium for examination. Considerable practice is required before one can give an expert opinion as to the character of a given specimen.

Another point of practical importance is shown in case 3. Here there was a fibromyoma, about the size of a turkey's egg, which enlarged the uterus to the size of a three and a-half months' gestation. A fibromyoma frequently co-exists with carcinoma of the body, and in case of hæmorrhage in an old woman it is not sufficient to look upon an obvious fibromyoma of the uterus as the only cause of the hæmorrhage. There is no direct relation between carcinomata and fibromyomata, but these two new growths are often found associated, because they both prefer to grow in a sterile uterus.

Having established a diagnosis, there is only one thing to be done—abdominal total hysterectomy. The vagina should be douched with weak formalin for at least three days, and the cervix ligatured immediately before operation. In my opinion these two precautions are most necessary, because when the uterus is removed from above, the risk of fouling the peritoneum is very great, and forms one, if not the greatest, danger. Abdominal total hysterectomy may be easy or very difficult. Many of the patients suffering from carcinoma are very fat, elderly women; in fact, one may apply to them Mr. Jacobson's aphorism in "Carcinoma of the Breast"—"One can frequently take a Sabbath morning walk around them."

As to the prognosis: of all varieties of carcinoma of the genital canal, that affecting the body is the best. The greatest danger is the immediate effect of the operation, for these women are old, and their power of resistance is diminished, so that the tissues and the blood cannot battle with sepsis. There is doubtless a great risk of peritoneal infection, and one must make quite sure that the urine is in a satisfactory state. The influence of chronic interstitial nephritis must, to my mind, be most carefully considered with the other risks before advising total hysterectomy.

From a pathological point of view, carcinoma of the body may be almost said to be a hopeful form of cancer, for the following reasons:—

1. The anatomical position of the growth, shut in, as it is, within a thick muscular box, allows of extensive removal.

2. The patient is generally old, and, therefore, the neoplasm grows slowly.

3. All forms of genital carcinoma do not readily disseminate to remote organs, but rather do their mischief by local infiltration. It is extremely rare to find visceral metastases even in advanced carcinoma of the body, and the ovary is, perhaps, most frequently attacked. These organs should always be removed in carcinoma of the uterus together with the tubes.

It will be noted that in two of the quoted cases both ovaries were the seat of secondary deposits, thus following the rule that secondary growths in the ovaries are nearly always bilateral and solid in consistency.

Clubs' Union Appeal.

(Received up to Thursday, May 31st, 1906.)

	£	s.	d.
Amount previously acknowledged ...	207	15	0
M. Trevelyan Martin, Esq.	2	2	0
G. H. K. Macalister, Esq., B.A., M.B., B.C.	3	3	0
H. Archer, Esq	1	1	0
	£214	1	0

The Hospitals of Spain.

By ARTHUR F. HERTZ.

Juan de Dios, a Portuguese settled in Spain, who died in 1560, spent his life and his fortune in establishing institutions for the sick. The hospital of Granada remains a monument to his generosity. Over the entrance is a kneeling statue of the founder, who was canonised a hundred years after his death. Thomas Guy, hardly less deserving, is only canonised in the minds of the inhabitants of the Borough, who, as every extern knows, are in the habit of speaking of St. Guy's Hospital.

The hospital of San Juan de Dios has hardly been altered since its foundation. A courtyard, with a fountain playing in the centre, is surrounded by a colonnade, above which is a covered gallery, from which the rooms of the first floor can be entered. The court is paved with marble, the fountain is of marble, and marble columns support the gallery. The whole presents a picture of great beauty. So fair is the exterior that it comes somewhat as a shock to see the interior of the wards. The beds are too close together, and the cleanliness of sheets and counterpanes is not beyond reproach. The tiled floor is uneven and but rarely washed. A dado of fine old coloured tiles and some faint remnants of frescoes on the walls remain, after 350 years of neglect, to show what a beautiful home Juan de Dios erected for his poor patients.

The religious element is much in evidence. At the end of each ward is a gaudily-coloured altar, and though I saw many priests, I came across no doctors except the house-surgeon who showed me round. On the walls of the gallery are portraits—not of former physicians and surgeons, but of saints and martyrs.

A large ward for syphilitic patients did not even show the slight signs of modern improvements visible in the other parts of the hospital; the floor was filthy, and an unpleasant smell pervaded the place. I was told that, as the patients had brought about their disease by filthy habits, a filthy home was all that they had a right to expect—a truly Christian sentiment, worthy of a country whose inhabitants celebrate Easter Sunday by flocking in their thousands to witness the tormenting and final slaughter of half a dozen bulls, which are too stupid to attack their human persecutors, but yet manage to kill or maim some twenty wretched horses.

Syphilis appears to be very common in Spain, and most public lavatories are decorated with advertisements for specifics against the disease. On the other hand, drunkenness is extremely rare, and water-sellers in the streets and railway stations, and at bullfights, drive a far brisker trade than would be possible in any other European country.

I found most of the men smoking, whether in bed or sitting up, for a Spaniard would rather die with a cigarette in his mouth than be saved by a period of abstinence. Spitting on the floor is as common in the wards—both male and female—as it is in the churches. Very few windows were open, and though a good many convalescent patients were lounging out-of-doors, no advantage was taken of the covered gallery, extending completely round the courtyard, and the glorious spring weather, by moving any of the beds out of the stuffy wards into the fresh air.

The hospital of the Five Wounds of Christ, in Seville, though fifty years older than that of Granada, is infinitely superior in its internal arrangements. The wards are less crowded and much cleaner, and a Scotch sailor, recovering from pneumonia, told me that he had been as well looked after as he would have been at home. But, just as in Granada, the wards for syphilitics were dirty and unrestored, and smoking and spitting were permitted indoors.

The exterior of this hospital is as beautiful as that of Granada, but instead of the marble courtyard there were a series of square gardens planted with orange trees. The appearance of the nurses suggested the reflection that the orange-blossom would be more appropriate in the park at Guy's than in the patio at Seville. They are all religious sisters, and seem to pay more attention to their devotions than to their patients. It is rare to find one in a ward except during a service, and for most purposes the patients have to help themselves or each other.

The largest hospital in Madrid occupies a position intermediate between those of Granada and Seville in regard to its internal arrangements, but the building

itself possesses none of the charms of either of the other institutions. It should be added that a fine new hospital, named after San Juan de Dios, has recently been built in Madrid on the plan of St. Thomas's in London, but I had no opportunity of seeing it during my short visit to the capital.

Spanish ideas on infectious diseases appear to be somewhat rudimentary. In Seville, patients suffering from such diseases are treated in the general hospital. A stable-like arrangement of boxes surrounding a court-yard is supposed to be reserved for cases of small-pox, which is very common in Spain, owing to the comparative rarity of vaccination. The marks left by the disease are seen constantly in the streets, and are only partially hidden by the powder with which every Spanish beauty covers her face. As at the time of my visit there happened to be only a single case of small-pox in the hospital, all the boxes but one were occupied by consumptives, and their wooden partitions alone separated the small-pox patient from his probably unvaccinated neighbours on each side.

There are three hospitals for lepers in Spain, two of which—those in Seville and Granada—I visited. Both are situated some distance outside the town, and are, on the whole, well arranged. I saw altogether between thirty and forty patients, most of whom were sitting in the gardens, where already, in early April, orange-blossom and roses were in full bloom. They all appeared to be quite happy and contented, and none of them complained of pain. A few showed the disease in its earliest stage, in which it closely resembles tubercle of the skin. The majority, however, had the appearance with which one is familiar from pictures, their faces being covered with large nodules, which completely obscured the normal features. Several had lost the ends of their fingers, and it was remarkable to see the women doing delicate needlework in spite of having mere short stumps in place of fingers. Ulceration was quite exceptional, and in only one patient had the nodular condition of the face been replaced by any considerable loss of tissue; his nose had disappeared, a small slit served as a mouth, and there was hardly a trace of a face left. A large proportion of the patients had leprous nodules in their conjunctivæ, and a good many had lost the sight of one eye.

Among the lepers in Granada I saw three sisters, aged respectively fourteen, sixteen and twenty-two. The eldest had had the disease already for five or six years; the younger two showed it in its earliest stage. Their mother had died from leprosy some years before. This remarkable instance of a family of lepers would seem to strongly support the idea that the disease is contagious. On the other hand, that does not seem to be the belief of the Granada authorities, who do not completely isolate the lepers. A man, convalescent from small-pox, was lying at the end of a leper ward; this was in order to save the sisters trouble, as so long as he had been in a room to himself he had to have special attendants. I suppose he was no longer actually in an infective condition, although he had been moved immediately after all the scabs had disappeared.

Seeing a healthy-looking old man lying in bed in one of the leper wards, I asked my guide what was the matter with him. "Oh, nothing," he replied, "he's a poor old chap who's lost all his money, and as we hadn't enough lepers to fill the ward, we thought we might as well let him occupy the vacant bed." When I was being shown round the hospital, the three little children of the housekeeper accompanied us, and from their friendly relations with the patients, I gathered that they were frequent visitors to the wards.

Jonathan Hutchinson's theory of the cause of leprosy receives some support from the fact that dried cod—"bacalhao"—is one of the favourite dishes of all classes of Spaniards. On the other hand, if the consumption of dried fish had any direct connection with the disease, one would expect it to be far more widespread in Spain than it actually is. Moreover, I ascertained from the lepers, both at Granada and at Seville, that none of them had indulged in any way excessively in bacalhao, and the three sisters already referred to had, in fact, only rarely tasted it.

In Seville, neither local nor internal treatment was attempted. In Granada, however, the patients were being treated with chaulmugra oil, which seemed to have had a decidedly favourable effect in several cases. A year's treatment with this drug had caused a woman's face, which had previously been covered with large leprous nodules, to present the smooth scarred appearance of healed lupus.

I found a number of the men in Granada excitedly discussing an old newspaper article on the serum treatment of leprosy. They had asked the authorities to try it in their cases, but up to now it has not been employed, owing to its great expense.

There is a medical school attached to each of the hospitals I visited, and at Seville I saw one of the physicians giving clinical instruction at the bedside—a method of teaching which is so conspicuous by its absence in Germany. It was curious to see that the students smoked, and that many of them wore their hats in the wards. The Madrid school possesses an excellent collection of wax models, and seemed in every way to be well equipped. This cannot, unfortunately, be said of the Seville and Granada schools, which were in every way much inferior to that of Madrid. Ramon y Cajal is professor of histology and morbid anatomy at Madrid, and the walls of his lecture-rooms are adorned with his beautiful neurological and other diagrams.

All Spaniards are delighted at the prospect of having an English Queen, whose beauty and "muy simpática" manner have already won the hearts of her future subjects. If Princess Ena lives up to the traditions of the English Royal Family, whose interest in all that concerns the care of the sick is proverbial, not least among the benefits she will confer upon her adopted country will be the inauguration of a new and better era in hospital management and in nursing.

'LIZA.

She was flirting shamelessly with everyone who would flirt with her—and everyone would.

Short straight unruly black hair, a rather big mouth with rows of white teeth set well apart, lively grey eyes, a white pinafore, a marabout, ragged and well worn, a tam o'shanter, and a big pink ribbon clinging to the short black hair as if it were every moment going to fall off. On her left foot she wore a high boot.

Such was Eliza, aged 12.

The next time I saw her, she came with a big sister under her wing; a big sister with a decayed 2nd molar. I drew that molar. 'Liza's sister was not very happy. 'Liza, the optimist, was radiant.

A few days later I renewed the acquaintance—'Liza herself this time the patient.

"Hullo Lizzie," I said.

"I ain't Lizzie, I'm Eliza. I know you; you're the Doctor wot pulled my big sister's toof out. I *am* glad you're my Doctor. I sorter don't feel 's if I was among straingers nah. I was 'ere before. Mr. 'Arrison was my Doctor. D'you know Mr. 'Arrison, 'e is a nice Doctor (I confessed to a slight acquaintance, and rose by leaps and bounds in her estimation), I was Caimbridge, and Mr. 'Arrison, 'e was Caimbridge; so my muvver bought two yards of light blue ribbon, and I wore 'alf in my 'air, an' 'e wore 'is in 'is button'ole, and then we caike-walked all dahn the ward. The Doctors and Nurses did 'ave ter laugh. Sister Lily used ter call me Ally Sloper. The Nurses 'ere are very nice, but they ain't wot Nurse 'All was; she was always so bright, d'you know Nurse 'All" (I confessed to an even slighter acquaintance, and went up still higher in her opinion); she added confidentially, "I love every limb of Nurse 'All. Would yer like a juju; why that ain't a juju, that's a acid drop yer've took. I'll pick yer out a juju. 'Ave yer got some paiper; I want ter write to Nurse 'All." The letter, full of the warmest kisses and the weirdest spelling, was duly despatched, accompanied by four jujubes and an orange.

In the course of the next two days we became fast friends, and 'Liza no longer flirted with all she met. I was even privileged to hold her two inches of hair while she tied it up with the pink ribbon.

"Doctor, when am I going 'ome? Monday! Oh, I am glad, I want ter go ter school on Toosday. Will my muvver fetch me? when'll muvver come? You'll 'ave to take me 'ome if muvver doesn't come."

I acquiesced in case that contingency arose. Muvver was due at 12 noon; at 8 p.m. muvver was not yet there, and I was summoned by telephone to redeem my pledge.

"You going to take me 'ome? Doctor, you carry my clothes." I obeyed, and descended the stairs with a brown paper parcel tied up with bandage under my left arm, and Eliza under my right.

"Give me yer 'and Doctor! I don't like crossing the street when it's dark 'cos o' the trams. Oh! ain't that shop full o' lights. Muvver says I'm to 'ave my ears pierced there when I'm big 'cos my eyes is bad. That's the shop where muvver pays her rent. We pays 12s. 6d. a week, my big sister wot's married only pays 7s. 6d., but then 'er 'ouse ain't so big. It ain't much furver now; dahn to the church and then dahn Suffolk Street, and dahn the 'Arrow Road and dahn Landy Street, and then it's number 10; why, there's Maggie Smiff."

This was the corner of Landy Street. Maggie Smiff was one of twenty children playing in the gutter. These, full of curiosity, followed us at a short but respectful distance. 'Liza, still hand-in-hand with me, and still babbling away, took no further notice, while the crowd of children grew to sixty.

"There's my sister wot you pulled 'er toof out." I handed over 'Liza and parcel into the sister's charge. Left without 'Liza's protection, I had not gone more than ten yards before the peculiarities of my costume attracted their attention and remarks. "Where's yer 'at Doctor?" "Why 'e ain't got no boots on."

Eliza is coming to see me again on Tuesday.

Reviews.

The price of books submitted for review should in every case be stated.

Modern Surgical Technique in its relation to Operations and Wound Treatment. By C. Yelverton Pearson. Pp. 392. (Messrs. John Bale & Danielsson, Ltd.) 10s. 6d. net.

This work, which contains the subject-matter of a series of lectures delivered at Queen's College, Cork, by the Surgeon to the Infirmary and General Hospital in that city, is rather larger and more pretentious than the large number of similar books which we have recently reviewed. The author has given us an excellent and complete account of operative details, with a fuller notice of those methods which he especially favours, which are a very moderate and sensible combination of

asepsis and antisepsis. We must protest, however, against the chapter on Surgical Bacteriology, which is quite unnecessary—especially in its present form: too short to give sufficient information on such a large subject, it has been rendered ornate by coloured plates of gonococcus, tubercle bacilli and typhoid, which add expense to the book and illustrate bacteria quite germane to the subject.

The other chapters—and they are many—are excellent, especially one containing descriptions of a long list of antiseptics, though a little more might have been said as to their relative germicidal power, as scientifically measured. Another chapter describes a marvellous collection of various sutures, needles and needle-holders illustrating them with good diagrams.

We are sorry to see such a long description of Turkey sponge sterilisation, as they should be banished from every operating theatre; Mr. Pearson does not himself use them, but recommends that the cotton swabs and pads should be used "over and over again" for different operations. Carbolic at one in twenty, we are told, is useless for sterilising knives; a depilatory consisting of barium sulphide and starch is recommended instead of the more usual razor, and the author considers that in *clean* operations the assistants, but not the surgeon, should wear gloves.

An excellent treatise, which all house-surgeons and young surgeons should find most useful.

Biographic Clinics, Vol. iii. By George M. Gould, M.D. Pp. 516. (Messrs. Rebman, Limited.) 5s. net.

Dr. Gould, like many a man before him, imagines that he has discovered the panacea for all evil, he thinks that he has discovered the cause, and hence a certain cure for nearly all the ills to which mankind is prone. If this book is to be taken seriously and its teaching implicitly believed in, medical treatment as such would have to be given up, and all general medical practitioners would be compelled "to close their offices"—as Dr. Gould would phrase it—for all minor ailments, and not a few more severe illnesses are to be treated for the future by spectacles and spectacles only.

Writing from Philadelphia Dr. Gould must be allowed a few eccentricities of diction, but the whole book savours far too much of the advertisement manual such as we receive from America by every morning's post. Pages are devoted to copies of gratulatory letters from other American specialists: to take a sample—"I have read your article with profound interest and benefit . . . I heartily congratulate you upon adding to our knowledge a definite scientific truth. Knowing the adverse criticism that is always heaped upon original investigators I take pleasure in asking you to accept my favourable comments in the spirit in which they are offered. Very cordially yours, H. Augustus Wilson." And there are many other letters like this,—one almost expects the postscript "P.S.—You may make what use you like of this letter."

Dr. Gould has made the discovery that very slight errors of accommodation, and slight differences between the refractive power of the two eyes can cause very severe headaches. This fact is very well known to ophthalmic specialists, though we read that "The Continent of Europe still lingers in pitiful barbarism upon this subject," and its value is rapidly being appreciated by practitioners. Dr. Gould, however, goes further, and announces that he has "cured at once and permanently by glasses" cases of chorea, flatulence, cardiac palpitation, stammering, epilepsy, and nocturnal enuresis! Can he *justly* complain that his "statements are described as American humbug?"

The medical litterateur of to-day now turns his attention to the illnesses of historical personages and endeavours to diagnose the complaints from which they suffered by reading their recorded symptoms with modern scientific knowledge. Many historical invalids have been so investigated, from Mary Queen of Scots to Mozart, and the present volume contains two chapters on the ill-health of Taine and John Addington Symonds—both of whom, according to Dr. Gould, suffered from eye-strain and its attendant symptoms, and from that alone.

The rest of the book consists of a series of papers on Eye-strain and its far-reaching effects; they have been read before various societies by Dr. Gould with the exception of one by Simeon Snell, F.R.C.S. Ed., and one by C. E. Pronger, F.R.C.S., which urge in more moderate language the importance of occular refractive errors and are very pleasant reading after the stilted and exaggerative sentences contained in the rest of the book, of which we must quote another example. "The high errors of refraction brutalize, immoralize, and exclude the owner from most occupations, the lower cause pain and illness."

A Handbook of Climatic Treatment, including Balneology. By Wm. Haggard, M.A., M.D., F.R.C.P., H.B.M. Consul at Davos, Switzerland. Pp. 525. (Macmillan & Co.) 12s. 6d. net.

Climatic treatment of diseases is admittedly of lasting benefit in many obscure and otherwise intractable cases. The subject has not received great attention by the profession as a whole, possibly because this form of treatment is within the reach of few, and again because the principles underlying it are not yet on a sufficiently secure basis.

This book comprises, in addition to a study of the knowledge of the subject, numerous facts collected by the author himself, and is the outcome of years of study in the subject.

The first one hundred and sixty pages are devoted to a study of the known facts of meteorology in relation to their physiological influence. The result of this *resumé* is a new classification of climates from the medical man's point of view. The classification has numerous arguments in its favour and is certainly a distinct advance on the older forms. The principle underlying the classification is that the medicinal value of a climate depends on its demand on the organism for heat production. This corresponds with the demand for tissue change, and *cæteris paribus* that climate is most tonic for the individual which demands the greatest amount

of tissue change that the individual can constantly make good.

Subdivisions are made according as heat demand is subject to fluctuations of small regular or large and irregular amounts.

Whether this basis of classification will be accepted by other authorities on the subject remains to be seen; it at any rate forms a basis for future work on the subject. The factor which causes so much trouble in climatic treatment is individual idiosyncrasy, and it must always be borne in mind in all cases where climatic treatment is employed.

The second portion of the book is devoted to the various classes of climates, and brief descriptions of the various health resorts of the world, with a consideration of their advantages and drawbacks. The third section of the work is devoted to Balneology, and the limitations of its value in Therapeutics. The last hundred pages give accounts of the various diseases which have proved susceptible of climatic treatment, and a few broad rules enabling the physician to choose a suitable climate for the particular case under consideration.

The book is carefully compiled and well written; it should prove of great value to the physician.

A point of some importance, which receives hardly sufficient attention by the author, is that a case which is cured by climatic treatment is liable to a relapse on return to its original habitat. This means that for complete cure a residence abroad of some years is often required. For those whose means are limited more information with regard to openings abroad would have been most useful.

Sport.

Cricket.

GUY'S v. WANDERERS.

Played at Honor Oak on Saturday, May 19th, and won by the Hospital. The Wanderers won the toss on a perfect wicket, but were dismissed for 145. These were knocked off by the Hospital for the loss of only three wickets. Barnett and Bookless made an excellent start, and on Bookless' dismissal, Barnett continued to play fine cricket, ultimately retiring for 102. Score:—

WANDERERS.

S. Colman, b Kahlenburg	3
E. A. Beldam, c Clarke, b Tolhurst	44
E. G. Hadoth, c Clarke, b Tolhurst	25
J. A. Darke, b Tolhurst	15
K. E. M. Barker, b Kahlenburg	23
H. J. Bull, b Kahlenburg	0
R. B. Brooks, b Wyatt	1
D. L. A. Jephson, b Wyatt	1
F. Morres, b Kahlenburg	15
A. L. S. Rose, not out	8
O. Taylor, b Wyatt	6
Extras	4
Total	145

GUY'S.

J. S. Bookless, st Brooks, b Bull	28
E. Barnett, retired	102
H. Simms, c Bull, b Jephson	28
H. D. Wyatt, b Rose	18
G. C. Covell, c Darke, b Rose	17
W. T. Clarke, c Barker, b Rose	8
A. M. Tolhurst, not out	9
M. M. Munden, c Rose, b Taylor	9
P. Pedrick, b Taylor	8
W. Ingram, not out	5
Extras	9
Total	241

F. Kahlenburg did not bat.

GUY'S v. GRANVILLE.

Played at Lee on Wednesday, May 23rd, and won easily by the Hospital. For Guy's, Chase secured 6 wickets for 31, and Kahlenburg 4 for 20; both bowled excellently, and were well backed up by smart fielding.

Score:— GRANVILLE.

Major Lowis, c Munden, b Kahlenburg	12
J. E. Lander, b Chase	4
O. B. Longworth, b Chase	0
R. Le May, c Jamieson, b Kahlenburg	3
J. A. Clarkson, b Chase	20
H. W. Le May, b Kahlenburg	3
L. J. Levinson, c Ingram, b Chase	0
M. Brown, b Chase	4
S. Walker, lbw, b Kahlenburg	5
G. Hodgson, not out	0
Groves (Pro.), c Jamieson, b Chase	0
Extras	2
Total	53

GUY'S.

E. Barnett, b Groves	37
H. V. Gibbons, lbw, b Groves	6
P. Smith, c Hodgson, b Groves	0
M. Munden, b Groves	44
G. Chase, b Lowis	50
W. Ingram, b Groves	4
W. T. Clarke, b Groves	0
A. M. Tolhurst, b Groves	4
F. Kahlenburg, b Groves	5
S. W. Jamieson, c Groves, b Levinson	24
W. Doll, not out	23
Extras	21
Total	218

Births.

FREMANTLE.—On 27th May, at 30, Chester Street, Belgrave Square, S.W., the wife of Francis Fremantle, Herts County Medical Officer, of a son.

GIBSON.—On May 15th, at Christchurch, New Zealand, the wife of Frederick G. Gibson, M.D. Lond. (née Flower), of a daughter.

HALL.—On 23rd May, at Bath Lodge, Bitterne, Hants, the wife of Edmund S. Hall, M.B. Lond., etc., of a daughter.

WILBERFORCE SMITH.—On May 7th, at Mossel Bay, S. Africa, to Alsie and Douglas Wilberforce Smith, M.B., B.S. Lond., a daughter.

Death.

APPLETON.—On May 11th, at the Lizard, Cornwall, George Appleton, M.R.C.S., in his eighty-fifth year.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

IN connection with the Clubs' Union Appeal we have received the following letter :—

58, Portland Place, W.,
June 9th, 1906.

Dear Sir,—With regard to your reference to the debt of the Clubs' Union, I will subscribe one-fourth of the amount still required, in addition to what I have already given, provided the balance can be raised before the issue of your next number.

Yours very truly,
CHARTERS J. SYMONDS.

The Editor,
"Guy's Hospital Gazette."

Mr. Symonds has already responded most generously to the appeal of the Committee, and this further offer which he makes once more shows his keen interest in the welfare of the Clubs' Union—an interest for which all members will be grateful. Up to the present a sum of £214 1s. has been subscribed towards the £321 11s. 4d. required by the Committee, thus leaving a sum of £107 10s. 4d. still to be raised. Of this, it is highly probable that the odd seven pounds will be subscribed before this issue is in the hands of members. A sum of £75, therefore, must be raised within the ensuing fortnight if the Clubs' Union is to benefit by Mr. Symonds' generous offer. It is not too large an amount, and we sincerely trust that the letter which we print above will serve to stimulate members and friends of the Clubs' Union, especially those who have not yet responded to the appeal, to send their donations to Mr. Croucher, at the Medical School Office, as soon as possible.

THERE is a world of truth in the remarks of our esteemed correspondent "E," who has a gentle tilt against the modern tendency towards concentration, and there is little need to add anything to the arguments he brings forward in favour of clinical "litter." To some of us the litter is indeed more interesting than concentrated essence. The desire for clinical information in tabloid form is a sign of the times indeed, but it is questionable whether it is in any way a good sign. It may be impossible in these days of examinations and cram to follow Voltaire's advice to the intending poet, "Read largely," but the student who can find the time to rummage amongst the litter is sure to be rewarded by lighting on a stray treasure here and there.

THE concluding part of "E.'s" letter is well worth our readers' careful consideration. It emphasises very clearly what we have already said, the desirability of active discussion in this paper. It is only by such discussion that we can estimate the interest which readers take in the GAZETTE, and find out what subjects appeal to the majority. We therefore repeat the

invitation for correspondence and discussion, and we hope from time to time to publish articles which will lend themselves to such discussion, in the sincere expectation that someone will take up the matter earnestly and commence a paper debate. With the conclusion of Dr. Haldane's lecture before them, readers have an excellent opportunity of starting such a discussion.

ONE of the candidates at the forthcoming election to the Council of the Royal College of Surgeons is Professor George Arthur Wright, B.A., M.B. (Oxon.), F.R.C.S. Mr. Wright is Professor of Surgery at the Victoria University, Surgeon to the Manchester Royal Infirmary, and a late Examiner in Surgery to the University of Oxford. He is an old Guy's man, and his record as student here is a brilliant one. He took the Treasurer's Gold Medal in Clinical Surgery in 1877, and held the usual appointments, finally becoming Surgical Registrar, a post which he resigned upon going to Manchester.

THE Biennial Festival Dinner will be held this year at the Hotel Cecil on Tuesday, July 3rd, at 6.30 in the Victoria Hall, under the Chairmanship of the Senior Surgeon, Mr. C. H. Golding-Bird. Some 200 Past and Present Students are expected to attend. Any students who are qualified, and who wish to attend, should send in their names at once to Dr. G. Newton Pitt, 15, Portland Place, W., the Honorary Secretary, together with 22s., the price of the dinner ticket, inclusive of wine. A list of the Stewards who have already signified their intention of being present at the dinner will be found on the inset slip in this number.

THE annual dinner of the Guy's Hospital Colonial Club will be held to-night, at 8 o'clock, at the Trocadero Restaurant. Mr. Charters Symonds has promised to take the chair, and all Colonial students are invited to attend. The term "Colonial," at least so far as the dinner is concerned, is held to include everyone who has been born, or has lived for any length of time, in a British dependency. Tickets may be obtained from either of the acting honorary secretaries, Messrs. L. Mandel and W. Welshman, at the usual price of 6s., exclusive of wine.

NOTWITHSTANDING the fact that the weather was not exactly what one would have desired, the Annual Sports went off very well. No records, we understand, were broken, but enough was done to justify the hope that our men would do well in the Inter-Hospital Athletic Competitions. That hope has, unfortunately, not been realised, and the only trophy that we brought back from the Crystal Palace grounds to grace the Smoking-room is the Tug-of-War Cup. Elsewhere in this issue appears the letter of the secretary of the University Sports Club, to which we beg to draw the attention of hospital athletes. It is in some ways a curious letter, and it is possible that there may be some difference of opinion as to the necessity for such a club, but under the circumstances we refrain from commenting upon it. It is to be hoped, however, that if Guy's men participate in the competition, under the conditions laid down in the secretary's letter, they will be more successful than we have been in the Inter-Hospital Sports.

THE Committee of the *Guyoscope*, after having wound up the affairs of our hospital Charivari, has been able to present the Clubs' Union with a substantial contribution towards its funds. The auction sale in the smoking-room proved a great success, the competition for souvenirs of our late contemporary being exceptionally keen and vigorous. There is still a number of copies of the paper to be obtained, and the Committee has decided to allow them to be disposed of in the interests of the Million Shilling Fund. They are on view in the library, and those who wish to obtain spare copies can do so on application to the Librarian. Many of the issues of the *Guyoscope* will have a permanent interest to students, and the whole of the six numbers that were produced under the new management will make an amusing and interesting volume which is sure to be prized in after years. As the number of copies is limited, an early application is desirable.

OWING to insufficient storage space, the GAZETTE Committee has decided to reduce the stock of back numbers of the GAZETTE. For a short time, therefore, a few copies of Volumes II. to XVIII.—1888 to 1904—will be on sale at three shillings each, that is, at rather less than half-price. Single numbers of any of the above volumes may be had at twopence each, post free, on application to the Librarian.

Treasurer's Gold Medals.

Commentary on a Case in Medicine.

Ada B., æt. 31, single, was admitted to the hospital on October 5th, suffering from *diarrhœa and anasarca.*

Family History.—The patient's grandmother *died of consumption;* her father and mother are alive and well; several brothers and sisters died in infancy of convulsions.

Personal History.—The patient had measles and scarlet fever when a child, and at the age of twelve is stated to have suffered from "consumptive bowels." About two years ago she had diarrhœa so badly that she was obliged to take to her bed, which she kept for nine weeks. She left home for convalescence, but the diarrhœa continued, and her legs began to swell. She was treated for "liver complaint," and for anæmia. She stayed in Paris for six months, and lived for a month on milk, taking as much as three or four quarts a day. This treatment had some effect in diminishing the action of the bowels, but being very weak and wasted she consulted Dr. R., who prescribed chops and steaks. At this time the œdema was gradually increasing, the diarrhœa continued, and at the time of admission she was passing motions on an average seven times during the day and three times during the night.

Condition on Admission.—The patient is wasted and very anæmic. There is marked œdema of the legs, and of the abdomen.

Nervous System.—The patient is intelligent, and answers questions readily. Special senses unaffected: muscles small and wasted, but neither paresis nor anæsthesia.

Respiratory System.—Chest very resonant, both sides moving equally on respiration. Some dulness at both bases behind, where also the breath sounds are feeble and almost inaudible.

Circulatory System.—Pulse weak, regular, 86 per minute. Cardiac impulse to be felt in the fifth intercostal space, a little internal to the nipple. No bruits; second sound accentuated.

Alimentary System.—Abdomen distended, pitting upon pressure. Umbilicus protruded, some ascites, superficial veins distended. No tumour to be discovered. Rectal and vaginal examination negative. Liver and spleen not felt; lymphatic glands in groin somewhat enlarged.

Urine.—Specific gravity, 1032, amber coloured, slight deposit of mucus. No sugar, albumen or blood.

TREATMENT AND PROGRESS OF CASE.

October 8th. Bismuth and Dover' Powder given. Fluid diet.

October 10th. Patient feeling better. Bowels not been open all night. Farinaceous diet.

October 11th. Not so well. During night was very sick; the vomit contained curdled milk. Bowels open three times.

October 13th. Ten motions during the last twenty-four hours. Less œdema of legs.

October 16th. Bowels have not been open for forty-eight hours. At 5 o'clock this morning very sick, with great pain over stomach, relieved by vomiting. The vomit had an acid reaction, was brown in colour, but contained no blood.

October 18th. Sick twice to-day. Great abdominal pain. Bowels have not been open.

October 19th. Sickness better; patient more comfortable after action of bowels.

November 1st. Has lost a stone in weight since admission.

November 10th. Anasarca very considerable; puffiness of face.

November 22nd. At 4 o'clock this morning the House-Physician was called, and found the patient cold, rigid and unconscious. She rallied slightly after treatment, but relapsed, and died at mid-day.

Discuss the diagnosis and pathology of the above case. Indicate what further means might have been adopted to throw light upon the condition. Describe the post-mortem appearances you would expect to find.

Commentary on a Case in Surgery.

A married woman, æt. 47, was seen on *April 9th.* She complained that *for five weeks* she had had abdominal discomfort with frequent severe paroxysmal pains all over the abdomen. These pains lasted about five minutes. She thought that they were not dependent on food or on constipation. Her bowels acted regularly. During the last two weeks the pain, which was gnawing in character, had increased in severity and had extended through to the back. There was no vomiting nor eructation, nor had she passed any blood by the rectum. Menstruation was regular. There was no fever. The patient was very thin. The abdominal wall was flat, and moved freely with respiration. On palpation there was great tenderness above the level of the umbilicus, where a hard mass could be felt, extending transversely across the middle line. It extended about two inches to the right, where it felt hard and nodular. To the left it was much more bulky and ill-defined, losing itself in the loin. It pulsated in a very marked manner, and the pulsation appeared to be expansile in character. An examination on the screen by the X-rays showed a very dark area filling up the left loin. No pulsation could

be detected in it. A print obtained later demonstrated that the shadow was not uniform, but very patchy. Pain was increased by manipulation; so much so, that it had to be controlled by morphia. Nothing abnormal was found in the chest or in the stomach, liver, spleen or pelvic organs. The fæces were normal and contained no excess of fat. The urine gave no pancreatic reaction. The symptoms increased in severity. The pain was more intense and more constant. The mass on the left side increased in size very appreciably, and pulsated more distinctly. The patient rapidly lost flesh and strength. An exploratory operation was performed on April 26th. This relieved her of all pain, but she died of exhaustion two days later.

Discuss the various points raised by the foregoing record. Give your views as to the nature of the lesion. Explain the various symptoms and the cause of death, and state what conditions you think were found at the operation.

(*For solutions see page 252.*)

Reviews.

The price of books submitted for review should in every case be stated.

Laboratory Manual of Physiology. By F. C. Busch, B.S., M.D., Professor of Physiology, University of Buffalo. Pp. ix. and 209. (Bailliere, Tindall & Cox.) Price 6s. net.

This book has been written on unusual lines. Description of apparatus and explanatory diagrams have for the most part been omitted; results of experiments and deductions from results obtained have been rigidly excluded. These, the author tells us in the preface, are "more properly the function of the instructor and of the student himself." The book thus consists of very brief descriptions of a series of experiments, and is quite unintelligible to the beginner without full and careful explanation by a competent instructor. The descriptions are in many respects deficient, and in some cases important facts are omitted; *e.g.*, the capillary electrometer is used in some experiments, and no mention is made of the fact that a microscope is needed to read the excursion of the mercury meniscus. It is recommended where it could only be of use if combined with microphotography on to a moving plate. No mention is made of microscope or photograph.

Numerous vivisection experiments are briefly described for the student to carry out—experiments involving complex aseptic operations, such as removal of thyroid, suprarenal, cerebral hemispheres, and a host of others too numerous to mention. We doubt very much whether the average student could carry these operations through successfully, and tremble to think what the anti-vivisectionists of this country would say to the slaughter of so many animals merely for the purpose of teaching. For some occult reason a few of these experiments are allotted to the demonstrator; they are the simpler ones.

The space devoted to emical work is wholly inadequate, and what is described is poorly done. Trypsin is not mentioned. The chemistry of the urine is completely ignored, yet the student is told to make quantitative urinary analyses after successfully removing the pancreas from a dog.

So much has been left to instructor and student himself that we feel a little more might have been left, and the author saved a lot of trouble. We do not hesitate to say that the book is almost worthless to any student in this country.

Essentials of Surface Anatomy. By Charles R. Whittaker. Pp. 40. (Messrs. J. & A. Churchill.) 2s. 6d. net.

This manual, which is interleaved for the students' notes, contains all the important surface markings of the verious organs in the body—each described in a few words, but without any illustrations, which, however, the student could very profitably supply for himself on the blank sheets. No essential markings are left out, and no errors are present so far as we have been able to test the work, though mention should have been made of the relation of the mental foramen to the biscupid teeth.

From the Gazette's Special Pathologist.

NOTICES.

H. L., MANCHESTER.—On section, this portion of umbilicus exhibits several cysts of variable size, filled with granular material. They have a lining of epithelium, which in the small cysts is columnar and in the larger ones is flattened. The cysts may be derived from remains of the intestinal diverticulum, or possibly from cutaneous glands. We do not think they represent any variety of malignant growth.

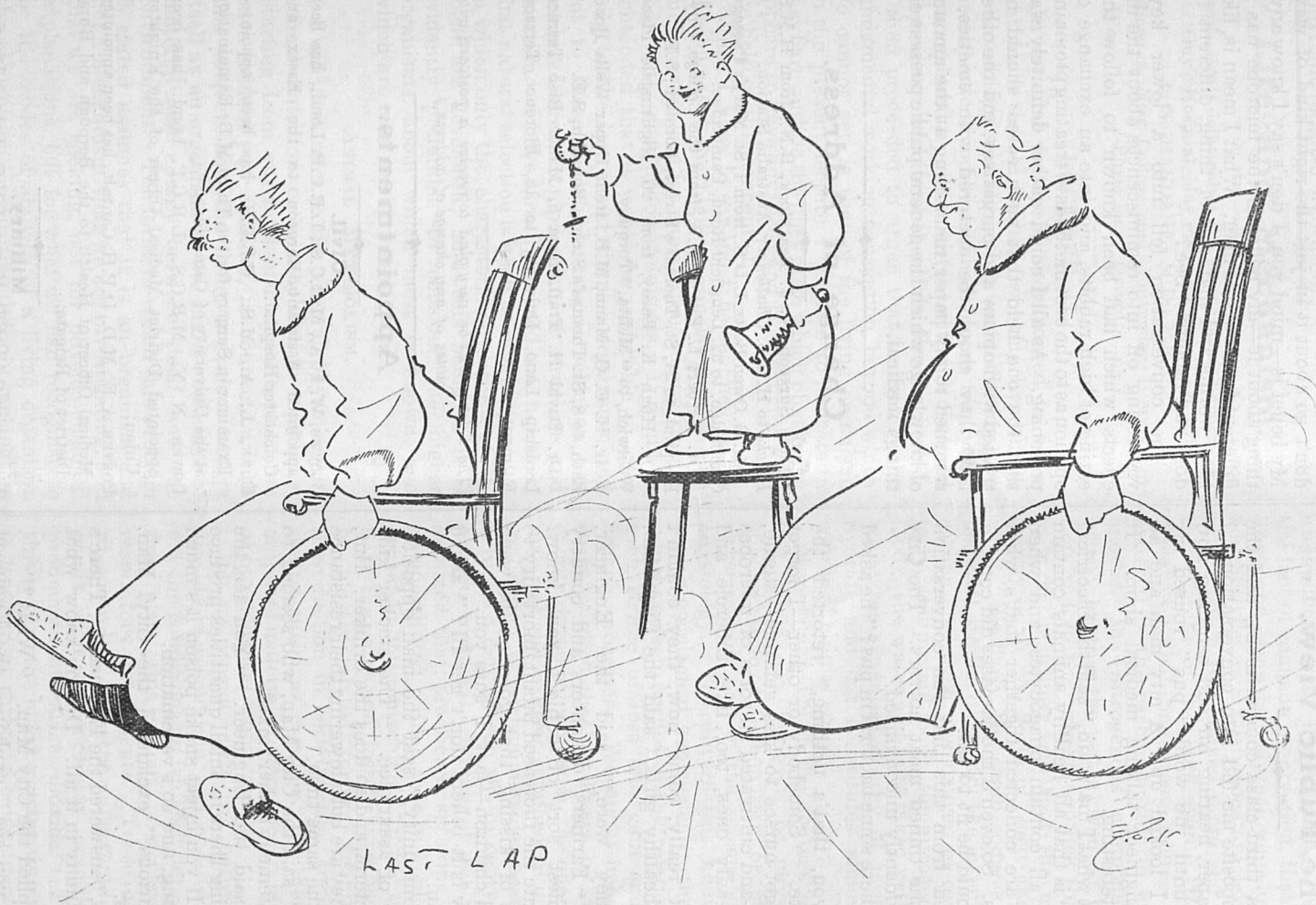
S. W., MIDDLESBOROUGH.—Considerable numbers of tubercle bacilli are present in this specimen of sputum.

H. G. A., NOTTINGHAM.—This specimen is a piece of indurated breast tissue with microscopic cysts, the result of chronic mastitis. In one or two places in the section there is some epithelial proliferation, but we cannot find any definite signs of malignancy. The glands show inflammatory changes, but no new growth.

E. H. G., AMERSHAM.—This specimen consists of oil or fat admixed with a little pus and blood. There are no fragments of organised tissue present.

PATHOLOGIST.

BOOKS RECEIVED.—Monro's Medicine, 2nd edition; Blumfeld's Anæsthetics, 2nd edition; Berkeley's Hand-Book for Midwives; Elliott's Public Health Legislation and Model Bye-Laws; Emery's Clinical Bacteriology and Hæmatology for Practitioners.



For those who suffer from ennui or obesity the ward chairs afford excellent recreation and exercise.

Startling effect on patients after reading an account of Guy's Sports.

The Public View.

IT was in a third-class compartment, and the two men opposite me fell into conversation. I read my paper, hearing an odd sentence now and then, until the word "pus" roused my attention. I looked up. A city man and an electrical engineer talking medical shop. It might be interesting.

"Yes, but what I maintain," said the Electrical Engineer, "is that all healthy animals contain pus. They all contain phagocytes, and when phagocytes are collected together that's what you call pus. So even if the carcases did contain pus they would be fit to eat."

I gathered from this that the conversation concerned the tinned meat horrors. The City Man was evidently unconvinced.

"Aren't there some bacteria in pus?" he asked doubtfully.

"Bless you, that's nothing," retorted the man opposite. "Somebody or other—I forgot the name—got nurses to kiss gelatine—sterile, you know—and cultivated all sorts of microbes from it—deadly ones, too, like tubercle and cancer."

"Oh, but really, come now, they couldn't have been healthy girls," said the City Man, aghast.

"Yes, they were," said the Engineer, solemnly. "Farmers' daughters and country folk—healthiest sort of subject, you know. They attribute the increased infant mortality to the amount of kissing that goes on between mothers and children—fact, I 'sure you.

"But how is it others don't get ill?" asked the City Man.

"That's immunity," said the man opposite, with an air of assurance. "The smoker kills heaps of bacteria, and so does the drinker. But, mind you, they are both lowering their resistance to them at the same time."

"Indeed," said the City Man, who seemed to find this statement rather mixed.

"Fact," said the Engineer. "You see, the microbes being there in small quantities produce immunity. If you inject snake poison it's much the same thing, and so's vaccination."

"Very curious," exclaimed the City Man. "It really is."

"Quite so," answered the Engineer. "There's a lot that's funny in it all. Do you know what I think?"

"No," replied the City Man. "What?"

"I think, you see," explained the Engineer, "the reason why these bacteriologists don't get on with cancer and tubercle is that they don't go about it in just the right kind of way. My belief is—mind you, I don't say I know anything about it—my belief is the microbe has a different form outside man. What I mean is, like tape worms and that sort of thing, different in dogs and rabbits. See?"

The conversation fell into a lower key, wandering off into reminiscences about the ill-effects which had been known to follow the eating of high rabbits, and into an exchange of opinion as to the best methods of treating ptomaine poisoning. As all I could gather definitely was that the one held that such cases should be treated with opium and purgatives, and the other that they should be doctored with emetics, I returned to my paper, marvelling at the amount of knowledge which the general public possess on things medical.

Change of Address.

Fleet Surgeon W. J. Bearblock, R.N., from H.M.S. *Hawke* to H.M.S. *Challenger*, Australia Station.

Mr. G. Owen Betts, L.D.S., from 1, St. Mary's Passage, Cambridge, to 32, Lensfield Road, Cambridge.

Dr. Herbert L. Eason, M.S., from the College, Guy's Hospital, to 24, St. Thomas's Street, Borough, S.E.

Dr. Hugh K. Lacey, from 26, Nightingale Place, Woolwich, to "Melita," Torquay.

Mr. H. C. C. Mann, M.B., from Upper Wells Road, Bath, to 8, St. Thomas's Street, Borough, S.E.

Dr. David H. Trail, from 5, Manor Rise Terrace, Lordship Lane, Dulwich, to 13, Florence Terrace, Falmouth.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Appointments.

Civil.

CLOWES, W. F. A., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant Surgeon to the Essex and Colchester Hospital.

DUNN, L. A., M.S., F.R.C.S., has been appointed Examiner in Surgery for the Third M.B. Examination at the University of Cambridge.

LOWER, N. Y., M.R.C.S., L.R.C.P. Lond., has been appointed District Medical Officer of the Knighton Union.

PORTER, A. E., M.D., D.P.H. Cantab., has been appointed Medical Officer of Health to the Borough and Rural District of Reigate.

Military.

Lieutenant-Colonel P. HEHIR, I.M.S., Lahore Division, has been appointed a Specialist in Fevers.

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Life and Mechanism.

Two Lectures delivered at the Physiological Laboratory, Guy's Hospital, May 17th and 24th, 1906, by
J. S. HALDANE, M.D., F.R.S.,
Fellow of New College and University Lecturer in Physiology, Oxford.

LECTURE II.

In my first lecture I endeavoured to show that while the old vitalistic working hypothesis in physiology was altogether unsatisfactory, the mechanistic hypothesis which, some fifty years ago, replaced it is inconsistent with the observed phenomena, and must therefore also be rejected. I then proceeded to argue that in biology the fundamental working conception, beyond which we cannot get, is that of the living organism. In the present lecture I propose to indicate in very bare outline the lines upon which physiology appears to have advanced and be advancing with the help of this conception.

What I have to say must be confined to the physiology of the higher animals, as to which our knowledge is far more extended and precise than in the case of lower animals. It might be contended that it would be preferable to refer only to the lower and simpler organisms, and not to those in which natural selection has produced great complication of structure and function. I have already pointed out, however, that natural selection is itself an organic process, in which only the characteristic features of life itself are developed; and this being so it is evidently preferable to consider the higher organisms, about which most is known, and which are most easily investigated.

ANIMAL METABOLISM.

I will first refer to the general physiology of animal nutrition or metabolism in mammals. Starting from our fundamental conception, we have evidently to consider, in connection with this subject, how the living organism asserts itself as an organism in the main exchanges of material and energy between itself and the environment. The form in which this problem is stated assumes that it is an organism and not a mechanism that we are investigating, and that we are seeking, not for physico-chemical explanations, but for what we can recognise to be the modes of activity of a living organism, this recognition constituting the only explanation expected.

Our knowledge of animal metabolism, as exemplified in the higher animals, starts from the fact of common observation, that in spite of losses and gains the body maintains its substance and activity at a fairly constant level. Closer investigation has defined more and more fully the sources of loss and gain. It has been discovered that one great source of loss of material is the carbon dioxide in expired air; another the nitrogenous compounds of the urine; another the water given off by evaporation and in the urine; another the inorganic salts of the urine; and that the main loss of energy is in the form of heat and muscular work. Similarly, the main sources of gain of material are the oxygen of the inspired air; the carbon, hydrogen and oxygen of carbohydrate, fatty, and proteid food; the nitrogen of proteid food; the water and salts taken with the food; while the potential energy of proteid, carbohydrate and fat constitutes almost the sole source of gain of energy.

Mere knowledge of the sources of gain and loss would not, however, be physiology, but only physiological chemistry or physiological physics—only part of the sensuous material of physiology. To convert this knowledge into true physiological knowledge further investigation has been needed of the relations between each source of loss and gain and the other organic processes. We might imagine a body so constituted that its losses of material and energy depended simply on the quantity of food material and oxygen supplied to it, just as the production of carbon dioxide, heat, etc., from a furnace depends on the quantity of fuel and oxygen supplied. Actually it was at one time assumed that, practically speaking, the body is so constituted. Such a body would be, not an organism, but a machine. In the actual living body the gains and losses have been found to be closely related to the maintenance and reproduction in both function and structure of the organism as a whole. Neither intake nor output of material or energy occurs independently of physiological requirements.

Let us consider first the output of carbon dioxide in respiration, and endeavour to follow out the conditions on which it depends. In the first place this output is dependent on the respiratory movements. These are, however, so controlled that the lung-ventilation corresponds with extraordinary exactitude to the production of carbon dioxide. The result of this is that the blood passing through the lungs is freed from carbon dioxide to practically the same extent whether the production of CO_2 in

the body is increased or diminished. The partial pressure of carbon dioxide in the blood and tissues is thus kept constant, and the harmful consequences known to result from an abnormal partial pressure prevented. We have every reason to believe that in bringing about this result the circulation is controlled similarly to the respiration, although experimental evidence on this point is not yet complete.

The production of CO_2 in the body has been found to depend on the constant vital activity of every part of the body-muscles, glands, nervous system, alimentary canal, connective and supporting tissues, etc. The old idea that CO_2 production is mainly a simple oxidation process occurring in the fluids of the body, and dependent merely on the supply of oxygen and oxidisable food material in these fluids, has been shown to be devoid of foundation. The production of CO_2 is intimately dependent on the life of all the tissues. In other words, it depends on all the conditions, structural and functional, on which the life of the organism as a whole depends; and to discover any true physico-chemical explanation of its production is the same hopeless task as to discover a physico-chemical explanation of life itself. We may discover chemical precursors of CO_2, or chemical conditions on which its *immediate* production depends, but it is quite certain that any such discoveries can only bring out still more sharply the dependence of CO_2 production on life. The main problems connected with CO_2 production in the living body are thus physiological and not merely chemical problems. Further research can and will reveal in greater detail how CO_2 production and its variations are related to the maintenance of organic structure and function; and the only explanations we need look for are, accordingly, teleological explanations, becoming more and more precise as experimental research advances. We find by observation that the normal production of CO_2 in animals is intimately connected with the other manifestations of animal life. Just as one part of the body is related to the others, so is CO_2 production associated with the various structures and functions of the living body; and there is a normal average measure of CO_2 production just as there is a normal size for the liver or kidneys. We also find that within wide limits CO_2 production is not increased or diminished in proportion to the abundance or scarcity of food or of oxygen; and this fact we can explain, since CO_2 production, which is associated with bodily activity of various kinds and heat-production, depends on physiological requirements, and these do not vary in proportion to abundance or scarcity of food or oxyen. On the other hand, the CO_2 production rises, particularly in small animals, with fall in the surrounding temperature, and not conversely, as might have been expected, the explanation being that increased heat-production, and therefore CO_2 production, is required to keep up the body temperature.

We may next consider the output of nitrogen in the urine. This has been found to be almost exclusively dependent on the breaking down of proteid material, whether derived directly from the food, or from the living tissues. Like the CO_2 output, the output of nitrogenous material, in urea and other forms, is always associated with animal life, but the nitrogenous output varies in a quite different manner from the CO_2 output. The most striking difference is that, provided a certain minimum is not reached, the nitrogenous output varies in more or less direct proportion to the intake of nitrogenous food. There is thus no normal nitrogenous output corresponding to the normal CO_2 output, since the intake of nitrogenous food varies greatly under conditions of ordinary health. This apparently anomalous fact was for long a puzzle, since it seemed to indicate that the organism is wasteful of nitrogenous food, and throws it away without regard to physiological requirements. The apparent anomaly was, however, cleared up by the work of Rubner, who showed that just in proportion to the consumption of nitrogenous material other material (carbohydrate and fat) is saved, proteid, when it is supplied in abundance, being used up in place of carbohydrate and fat, the one substance being substituted for the other in exact proportion to its energy-value. The discovery of this very beautiful law of substitution at once furnished a clear physiological explanation of many otherwise obscure facts connected with animal metabolism. It is now very evident that under normal conditions the total metabolism of the body, measured in terms of the energy-liberation corresponding to it, is approximately constant, but may be made up in different ways. carbohydrate, proteid, and fat being substituted for one another according to circumstances. If abundance of all be provided, proteid is preferred, and if only carbohydrate and fat are available in abundance, carbohydrate is preferred; fat, which is far the most convenient form in which energy can be stored in the body, being thus always saved wherever possible. So far from there being waste of material in the body there is therefore

strict economy, and so exactly is this balance of expenditure of material in terms of energy-value carried out under normal conditions that a living organism might be used as a differential calorimeter for different food materials. By a strange confusion of thought this very fact has been adduced in support of the mechanistic theory of life! When we consider how easily the metabolism is greatly increased or diminished by variations in muscular activity it seems probable that future investigation will reveal in the phenomena of "fatigue," and the tendency to muscular activity seen, for instance, in play, a delicate means of adjustment of the normal energy output.

The output of water has been less fully investigated than that of other substances, but appears to be related closely to physiological acquirements. The proportion of water ordinarily present in the urine would seem to be related to physiological economy in the work of the kidneys, since a very concentrated urine would imply more work in secretion. The water secreted by the respiratory passages, and thence carried off by evaporation, is evidently necessary for the efficient working of the ciliated epithelium lining the mucous membrane. The secretion of water as sweat from the skin is related to the regulation of the body temperature, and of course varies with the production of heat in the body and with the surrounding temperature, becoming very great when the latter is high.

The output of inorganic salts by the urine is very variable, in marked contrast to the very constant proportions of many inorganic salts in the blood and various tissues. As inorganic salts, although essential to life, are not used up in the body, and hence do not come into the category of waste products, we may regard the salts of the urine as representing in the main a surplus not required, and the presence of which within the body would be actually harmful. This surplus arises in part from salts present in the food, and in part from the constant liberation of sulphuric and phosphoric acids within the body. The only inorganic salt actually added to the food by men and some animals is sodium chloride. As has been pointed out by Bunge, this is probably explained by the fact that though sufficient sodium chloride is naturally present in ordinary food materials, the chlorine, and possibly also the sodium, enter into other combinations in the body, and these combinations are eliminated as foreign and surplus substances. Thus the excess of potash salts in vegetable foods leads indirectly to a loss of sodium chloride, which produces a scarcity of this substance, and a consequent craving for sodium chloride.

A study of the elimination of inorganic salts under different conditions certainly confirms the interpretation just given of the physiology of their output from the body. Thus, when food deprived of its salts is given, the elimination of sodium chloride and other salts falls to an extremely low minimum, although the percentage of salts in the blood and other tissues remains nearly normal. In ordinary starvation, on the other hand, salts are eliminated in proportion to those present in the tissues which break down to supply the bodily metabolism. Hence, for instance, potash salts from the muscular substance, and phosphate of lime from the bones, are present in abundance in the urine, while sodium chloride is very scarce, since the blood, which is the only tissue containing much sodium chloride, is very slowly used up in starvation.

Coming now to the intake of material, I may refer first to the intake of oxygen. This, like the output of CO_2, is determined according to the expenditure of energy, and therefore shows the same average constancy and temporary fluctuations, owing to muscular work, etc.

The intake of organic food-material is evidently controlled in accordance with the requirements for maintaining normal bodily activity, although detailed study of this control is still lacking. In the case of adult men the average energy-value of the food has been found to be about 3,500 calories, made up of varying proportions of proteid, carbohydrate, and fat, a minimum of about 50 grammes of proteid (200 calories) being, however, always present. Apart from this necessary minimum it seems to matter little whether fat, carbohydrate, or proteid is used to make up the necessary amount. The amount taken varies, of course, from day to day. When there is an excess this is nearly all stored up as fat, and to a much less extent as carbohydrate and proteid, the reserve of stored material being always large under normal conditions. When there is a deficiency the stored material is drawn upon; and even after prolonged starvation the metabolism during rest remains about the same if measured in energy-value, although the capacity for muscular work is diminished. The size of the body does not vary in proportion to the abundance or scarcity of food-material. It is the organism which determines its own intake of food-material, not the varying abundance of food which determines the size and composition of the organism.

The intake of water, like the intake of food, follows the body's requirements; and just as there is a storage of food-material, as fat, etc., so there is a storage of water, chiefly in the muscles. This store of water is drawn upon during scarcity or excessive sweating, and afterwards replenished. If from any cause, however, a further excess of water is drunk, this is got rid of in the urine, just as the inorganic salts are. The intake of these latter need, perhaps, hardly be referred to further.

From the foregoing survey of general metabolism as observed in higher animals it seems evident that the phenomena connected with it are only intelligible in the light of the assumption that the nature of an organism is to maintain its fundamental structure, composition, and activities. Its activities do not run down or flare up under the varying influence of environment, like those of a machine; nor does its structure wear away piece-meal. The organism itself exerts an active deciding influence in the give and take between itself and its environment, and unless this fact is taken into account it is impossible to place the physiology of animal metabolism on a sound scientific basis. The crude physical and chemical theories of animal metabolism and tissue growth which became current before the phenomena had been at all adequately investigated have indeed been shattered to pieces by the more exact researches of the last fifty years; and from no department of physiology can stronger evidence be adduced of the characteristic active autonomy of the living organism.

SECRETION AND ABSORPTION.

The physiology of secretion and absorption naturally fall to be considered next; and may conveniently be taken together, since in each case the central phenomenon is a transference of material from one side to the other of a layer of epithelial cells. Both secretion and absorption were for long very generally regarded as essentially processes of mechanical filtration from or to the blood, the nature of the filtrate depending on the sizes and shapes of the pores or fine tubules through which the filtration was supposed to occur, and the process being aided by diffusion. The closer experimental investigation of the last fifty years has, however, rendered this view untenable. As is well known, it has been found that secretion may occur although the pressure in the secreting ducts is higher than in the blood. In other cases also the concentration or partial pressure of the substances secreted is far higher in the secretion than in the blood. Such substances must be either formed in the gland cells or actively selected by them from the blood. Instances of this kind are afforded by the secretion of urine, in which case the concentration of urea, sulphates, phosphates, urates, etc., may be enormously greater in the urine than in the blood, these substances being selected from the blood, and not formed in the secreting epithelium. Another very simple instance is afforded by the gas in the swimming bladder of fishes. The partial pressure of oxygen in sea water is only about a fifth of an atmosphere, whereas that of the gas secreted into the swimming bladder may amount, in very deep water, to as much as 100 atmospheres. The processes of secretion and absorption have also been found to be accompanied by absorption of oxygen and formation of carbon dioxide, and to be easily affected by drugs and poisons. Lastly, morphological changes of various kinds in the secreting gland cells have been observed to accompany secretion and absorption.

There can thus be no doubt that secretion and absorption are processes which are intimately and directly dependent on the life of the secreting or absorbing epithelial cells. The transference of material which takes place must be regarded as a part of the metabolic activity of these cells. This metabolic activity is evidently continuous, since the cells are extremely sensitive to any interruption of the blood-supply, and are known to be at any rate always absorbing oxygen and producing CO_2; but the actual secretion may be intermittent. We can also be certain that their metabolic activity is a very many-sided one, connected in endless ways with the metabolic activity of other cells in the body. Thus the removal or destruction of a gland may have the most complex and far-reaching influence on the rest of the body—an influence which has in various instances been shown not to be due to mere absence of the secretion. Examples of this are furnished by the effects of excision of the pancreas, liver, or kidneys. The mere blocking off or diversion of the secretion from any of these organs has by no means the same effects. In the case of the liver our knowledge of its secretory activity is already overshadowed by what is known of the other metabolism; and there can be no doubt that as investigation advances great additions to knowledge will be made through the study of the many-sided metabolism of the cells concerned in secretion and other functions.

This metabolism can only be studied fruitfully when it is regarded as playing its part in the

metabolism of the body as a whole. It is very evident that in the highly differentiated animal tissues the special physiology of any part of the body is, practically speaking, the physiology of the whole body. The special modifications of form, structure, and metabolic activities in each part are determined by its physiological relations to other parts. Hence, if each part or organ is investigated separately, and without reference to the conception of the organism as a whole, no satisfactory progress is possible: we are simply confronted with a confused collection of unintelligible observations. If the body is regarded as simply a complicated mechanism it follows that in order to understand it we must study the structure and properties of each part separately, deducing their mode of interaction from the knowledge thus gained. The mechanistic theory of life has unfortunately led to a general adoption of this latter method, with the result that progress has been slow. Much effort has been spent in vain attempts to establish mechanical theories of secretion and absorption, and the negative knowledge which has resulted does not by itself carry us very far. Merely to have learned that absorption and secretion are not filtration or diffusion processes is doubtless important, but we require to understand the normal physiology of the organs concerned.

Although our knowledge of the physiology of secretory and absorbing organs is still very fragmentary, owing partly to the cause just mentioned, much has nevertheless been ascertained from a study of their behaviour under approximately normal conditions, purposely varied experimentally. We know, for instance, that the kidneys react most delicately by increased secretion to any excess in the normal proportion of various substances circulating in the blood; and that secretion by the digestive glands is also regulated, partly through the nervous system, and partly through substances carried in the blood, in accordance with physiological requirements.

Very little is yet definitely known as to the metabolic activity of secretory and absorbent organs apart from actual secretion and absorption; and such knowledge as we possess refers chiefly to the liver, which has been shown to possess the power of arresting and converting various substances—sugar into glycogen, ammonia into urea, hæmoglobin into bile-pigments, etc.

Looking at the physiology of secretion and absorption as a whole we find that these processes are due to the activity of living cells with highly specialised metabolic activities, this specialisation being, so far as our knowledge goes, only intelligible teleologically, as necessary for the maintenance of the rest of the body.

The Blood and Circulation.

Let us next consider the physiology of the blood and circulation. Apart from the physiology of the heart itself the circulation of blood is intelligible as a purely mechanical process. The action of the blood as a carrier of oxygen, CO_2, and other substances is, further, perfectly explicable on physical and chemical grounds. It is natural, therefore, that the analogy of the circulation should have been made a main basis of the attempts to show that the whole body is nothing but a complex mechanism. In the famous mechanistic physiology (*De Homine*) of Descartes the circulation was regarded as the motive power for the muscles, nervous system, glands, etc. He even supposed (*De Formatione Fœtus*) that the blood-pressure moulds the tissues of the body during fœtal life, and that the heart's action itself is due to a mechanical process.

Besides the circulation there are many other mechanical processes connected with the living body. As instances may be mentioned the processes of mastication and swallowing, the ventilation of the lungs with air, the production of voice, the focussing of light in the eye, the conduction of sound waves in the ear, and the action of the various groups of muscles on the bones and joints throughout the body. There are also chemical processes, such as that of digestion, or the taking up and giving off of oxygen and CO_2 by the blood. Many new physical and chemical processes, both intracellular and extra-cellular, are certain to be discovered as investigation advances.

Now let us ask, in the first place, in what sense the organs of circulation, and the other parts of the body concerned with these mechanical or chemical processes, are mechanisms. They are all parts of the living body, have grown and developed with it, and participate in its constant metabolism. There is, for instance, no tissue which, in spite of constant loss and gain, maintains its volume and composition with more striking constancy than the blood. Neither starvation nor ingestion of food and drink materially affect it; liquid injected into it is got rid of with remarkable rapidity; and any loss of blood by bleeding is soon replaced. Yet we know that it is through the blood-stream that all the exchange of material between different parts of the body is brought about. We also know that the blood corpuscles are constantly breaking down and

being replaced by new ones, formed in the bone-marrow. This vital metabolism of the circulatory system is doubtless due chiefly to the activity of its lining endothelium, which most certainly does not play the mere mechanical part which has often been attributed to it. The other so-called "mechanisms" can likewise be shown to have all the characteristics of the living body, inasmuch as they actively maintain their structure, just as the organism as a whole does so. There is thus no warrant for calling them mechanisms, and thus ignoring what is one of their essential characteristics.

But there is another fact of equal importance with regard to the mechanical processes in the body—namely, that they are entirely subservient to physiological activity, and can only be understood as forming a part of it. As we have already seen, it was formerly supposed that the circulation of the blood determines various forms of physiological activity, such as secretion, the action of the central nervous system, &c. This was putting the cart before the horse—a process characteristic of the mechanistic theory. In reality the circulation has been found to be only subservient to physiological processes. By means of the vaso-motor nervous system the blood-flow through various organs, such as glands or muscles, is increased or diminished according to the degree of activity of these organs and consequent need for blood. The altered blood-flow is the result, not the cause, of the variations in activity, since an increased blood-flow does not by itself cause a corresponding increase in activity. Similarly, the variations in the heart's action, the rate of ventilation of the lungs, or of digestive changes, are not determining causes of physiological activity, but subservient to it; and the same is evidently true of the various other mechanical and chemical processes throughout the body.

To sum up, neither the circulatory system nor any other structure in the living body can properly be described as a mechanism; and the mechanical and chemical processes which undoubtedly take place in connection with these parts in the living body are only intelligible as subservient to organic activity.

THE NERVOUS SYSTEM.

I come now to the nervous system. In the treatment of this subject it will be necessary to keep within the bounds of physiology as distinguished from psychology. Men or animals regarded as conscious individuals, the subjects of knowledge and volition, lie outside of the scope of physiology, just as the phenomena of life lie outside the scope of physics and chemistry. Nevertheless it is possible in observing our own sensations to treat them as mere states of the body, and abstract from their psychological aspects. In this way self-observation is legitimately employed in connection with the physiology of the senses and central nervous system generally; and the subjective phenomena observed under this limitation fall within the limits of physiology and not of psychology.

Like the circulatory system, the nervous system, as regards its development and nutrition, is the seat of the same characteristic metabolic processes as the other parts of the body. It therefore cannot be regarded as a mechanical structure. But the processes occurring in it resemble in many respects mechanical processes, and have been commonly regarded as such. We have, therefore, to inquire in what sense this mechanistic interpretation is warranted.

On the mechanistic hypothesis this system is a complicated arrangement of conducting channels—the nerve-fibres, connected at their peripheral ends with all parts of the body, and at their central ends with groups of nerve-cells, acting as centres for the transfer of afferent impulses to efferent nerve-fibres, or to fibres passing to other centres. Both the transmission of impulses and their transfer in the nerve centres are assumed to be mechanical processes dependent upon the physical structure of the nerve-fibres and nerve-centres, any energy required being supplied at the expense of concurrent chemical changes. Simple reflex action is taken as the type of these processes, the more complex nervous responses being regarded as merely very complicated reflex action.

As to the exact nature of the process taking place in the transmission of nerve-impulses we have no very certain knowledge. Nerve-fibrils are undoubtedly living structures; but there is no clear evidence that the characteristic metabolic changes which accompany vital activity in other tissues are associated with the conduction of nerve impulses; and in the absence of such evidence it seems quite possible, though not probable, that the passage of a nerve impulse may be, like the flow of blood through a blood-vessel, in itself a purely mechanical process.

The further mechanistic assumption, that the nature of the response of a nerve-centre depends upon its physical structure, must be carefully considered. If we examine a reflex, such as that of assuming a normal position or removing an irritant, it soon appears that the process is by no means the blind mechanical response which

it may at first sight be taken to be. For the actual muscular response varies according to the position from which the limbs are moved or to which they may require to be moved. Indeed, the physical response varies endlessly according to circumstances. It is the end attained, and not the physical response, which is simple and definite. A mechanism which attains ends in this way is inconceivable.

The response is determined, not merely by sensory impressions from any spot stimulated, but also by impressions from many other parts of the body. This is a general characteristic of the activity of the central nervous system, and leads to the conclusion that in reality the afferent and efferent nerves are in a continuous state of activity, and continuously in active relation with the central nervous system. Further, the strength of the response does not vary in proportion to the strength of the physical stimulus. In other words, the "excitability" varies, depending for one thing most markedly on the state of activity of other afferent nerve-fibres. For instance, light rays of a certain intensity falling on a certain part of the retina may produce either a very marked sensory effect or no sensory effect at all, according to the amount of light falling on other parts of the retina.

But analysis of the phenomena carries us much further. The activity of the nervous system clearly depends not merely on influences from peripheral surfaces, joints, muscles, etc., but also upon influences from visceral organs. These influences are in part transmitted through visceral nerves, but chiefly through the blood. It is a familiar fact that arrest of the circulation, or of the oxygen-supply from the lungs, causes a rapid turmoil in the action of the nervous system, followed by arrest of function, structural changes in the nerve-cells, and death after a short time. A very slight excess or deficiency of carbon dioxide in the blood also produces an alteration of function; and we have every reason to believe that almost any abnormality in the blood—for instance, in the percentage of sodium chloride, potash salts, ammonia, water, or the various special metabolic products of the glands, muscles, reproductive organs, nervous system, etc.—may profoundly modify the working of the nervous system. One or other "reflex" or "instinct" is lighted up or extinguished. A small excess of carbon dioxide in the blood will, for instance, concentrate almost the whole activity of the nervous system on efforts to increase the lung ventilation and rate of blood-circulation, at the same time blotting out the responses to other physical stimuli.

It would thus appear, firstly, that reflex action, even regarded as an isolated phenomenon, has not the characteristics of a mechanical process, and, secondly, that the activities of any part of the nervous system are intimately dependent both quantitatively and qualitatively on those of other parts of it and of the rest of the body. We can proceed to explain the phenomena if we make the fundamental assumption that the nature of an organism is to maintain and reproduce, in the face of varying environment, its structure and activities as a whole; but apart from this teleological mode of explanation there is none.

It is characteristic of nervous activity that many of its manifestations occur intermittently and at irregular intervals. It would seem, however, that what appears to superficial observation to be a state of physiological rest is never so in reality. The "resting" tissues can be shown to be the seat of constant metabolic activity, although no external stimulus may be acting on them; and in the case of the nervous system each part, as already remarked, is constantly in active physiological communication with other parts of the body through the connecting nerve-fibres and the circulation. The more or less explosive outward manifestations of activity are merely temporary fluctuations in this constant activity, which has itself all the fundamental characteristics of organic activity. It follows, therefore, that these same characteristics apply also to the explosive manifestations.

The responses of the nervous system present to a marked extent the superficial appearance of deliberate purpose based on elaborate consideration, although no conscious purpose or knowledge is present. Thus the co-ordinated muscular movements produced by the activity of the respiratory centre are elaborately adapted to the purpose of removing carbon dioxide from the blood and supplying oxygen to it. In a simple undifferentiated organism an increase in the carbon dioxide present in the protoplasm would naturally lead to increased activity in its elimination. The elaborate response to excess of carbon dioxide in a highly differentiated organism is in reality only a development of the same reaction, the efficacy of the response in removing the stimulus being the guiding influence. This is true whether or not natural selection has been a factor in this development. As already shown, natural selection is in itself an aimless process, incapable of bringing about organic evolution, apart from the guiding influence introduced by the fact that the nature

of living organisms is to actively maintain, develope, and reproduce their specific structure and activity; and in order that natural selection should influence the development of a specialised respiratory system we must presuppose that organisms are actively intolerant of excess of carbon dioxide or deficiency of oxygen. The influence of natural selection, whatever it may be, is thus subordinate to the teleological factor, and even in the case of the complex activities of the nervous system the teleological conception is the only one which is ultimately capable of rendering the phenomena intelligible.

It is perhaps scarcely necessary to refer in detail to the physiology of the muscles or the supporting and connecting tissues of the body. On the one hand, the nutrition of these living parts of the organism is determined with reference to the whole, just as in the case of other living parts. On the other hand, their more specialised vital and mechanical activities are under the immediate control of the nervous system, to which reference has already been made.

CONCLUDING REMARKS.

I have now completed a very cursory survey of the data of physiology in their bearing on the question before us, and have endeavoured to illustrate in some detail the necessity for making the fundamental assumption that the living organism is an organism and not a machine.

There is a point which may be urged in objection, and to which I wish to refer briefly. Physiological investigation is based on observation and measurement of changes which can, when taken by themselves, only be stated in physical and chemical terms. We observe and measure the intake, output, and exchange within the body of various chemical materials and forms of energy; also various changes in the mass and form of different parts of the body. These observations, it may be pointed out, are physical and chemical observations, expressed in terms of the fundamental working hypotheses of physics and chemistry. Hence, it is argued, physiology can be nothing else but the application of physics and chemistry to the phenomena of life, however imperfect and unsatisfactory this application may be. If we start from physical and chemical phenomena, we can never relate them to anything else but other physical and chemical phenomena, since any such relation would be totally unintelligible.

In answer to this objection, I would point out that in biology the phenomena which are or ought to be observed from the very beginning are not physical and chemical phenomena as self-existent events, but these phenomena as expressions of the activity of living organisms. It is the living organism, and not the physical phenomenon, which is the reality for biology. In precisely the same way the phenomena of extension, form, movement, colour, etc., are treated in the physical sciences as the expressions of matter and energy, these latter representing the conceptions by means of which the sensuous data are interpreted.

For biology the world is not a world of matter and energy, but of living organisms in an environment organically related to them. The world of actual experience can only be partially brought under biological conceptions or those of any other science. The fundamental conceptions of the sciences are only working hypotheses, adequate in each case to only certain aspects of experience. Hence it is that in our ordinary experience organisms, and particularly their environment, may, and indeed must, be regarded from the merely physical and chemical standpoint, as well as from the biological standpoint. Nevertheless the ultimate ideal of biology must necessarily be to extend biological conceptions to what we at present regard as inorganic phenomena; and perhaps recent discoveries as to the ultimate nature of atoms are pointing towards the possibility of this ideal being realised, and of the physical sciences thus joining hands with biology.

I should like, in conclusion, to summarise the main contentions brought before you in these lectures. I have endeavoured to show that in physiology we must start from the teleological conception of the living organism, since living organisms cannot be explained as either pure mechanisms, or mechanisms guided by some extraneous influence, such as the so-called "vital force," and there is no sound philosophical basis for the contention that in physiology physico-chemical explanation is the only real explanation: that all physiological explanation must, accordingly be, in the long run, teleological explanation; and that we are thus furnished with an effective working hypothesis, with the help of which physiology can advance steadily and progressively.

Those who are inclined to disagree with these conclusions will at any rate agree with me in this—that the final test of any scientific hypothesis is its utility. I am far from maintaining that the mechanistic theory of life has not, for want of a better, been of great service to physiology in the past; but I think it has done its work and lost its usefulness, and that the time has now come to replace it.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Concentrated Essence of Clinical.

DEAR MR. EDITOR,—Arising out of your Passim note and your efforts to fall in with the suggestions of your readers, may I say that I see no objection to your putting the clinical lectures in any part of the GAZETTE you please. But as another old Guy's man, older I suspect than he who wants to bind his clinical lectures severely alone, may I protest against my colleague's greed for concentration. It's a sign of the times, I fear, and I am told that the "boys" at Guy's—we used to call ourselves "men"—want clinical demonstrations shorn of the clinical "litter" we used to pick up going round the wards. But the clinical "litter" was very useful, and often, as a valued fragment, fixed itself in some out of the way corner of one's brain, whilst the formal lecture has gone for ever. Surely the four or five inches of shelf-room that our friend would save in discarding his useless pages from twelve years of his GAZETTES would hardly be worth the sacrifice. Suppose that in looking up an old clinical lecture in after years his eye was distracted by the report of a Rugger cup-tie, the obituary notice of some beloved teacher or fellow-pupil, or even by a grumble on the catering in the club, would the patient on whose behalf he was searching for a "tip" lose anything if his earnest practitioner refreshed his youth by such early reminiscences? Are not we all just a bit too earnest now? Is the slavery of the examination system entering into our souls and driving out interest in all other things except concentrated essence of instruction? I sympathise with your desire to encourage the interchange of ideas in your excellent GAZETTE. We like to hear you, Mr. Editor, and your predecessors, and your successors, talking to us through the notes in Passim, and we should like to hear some of your readers, too, airing their views on the political, educational, social and economic problems of the school and the profession. Even now and then a grumble about the management of a club is refreshing, but we should like to hear grumbles about the management of the great world and our little profession, grumbles that would make us hope that men were being trained in Guy's, not only to cure patients, but to take their part in remedying some of the wider-spread evils with which they will come in contact when they get into practice.—I am, yours faithfully,

E.

June 5th, 1906.

Guy's Hospital Rifle Association.

DEAR SIR,—May I bring to the notice of your readers the fact that the Committee of the above Association are striving their utmost to regain possession of the two Shooting Cups, and that they stand to fail signally unless men will show a much keener interest in the Club? As will be seen in another part of this issue, our team put in a score of 449 last Wednesday week, against Mary's 516. There are still two more shoots to take place for the Armitage Cup, and we have a chance *provided we can get in two good scores.* At present, the Committee know the capabilities of about *nine* men out of the *thirty* odd who can shoot! The notice which has been in the Colonnade, *re* a *handicap* sweepstake on Armitage shoot days, resulted in one man, beside the team, turning out on the 6th inst. The idea of the sweepstake was to encourage men to come down and shoot, and I hope that more will do so on Wednesday next, the 20th inst.

The Bisley Cup will be shot for on the 12th prox. at Bisley, and we want to have the best possible team in to win it.

I might here draw attention to the fact that there will be a prize meeting of the United Hospitals' Rifle Association on the last Armitage shoot day, and concurrently with this will be held the Hospital meeting, the prize list of which includes the Newton Pitt Challenge Cup, for the best score under current King's Prize (1st stage) conditions.

I trust that this letter may perhaps stir up a certain enthusiasm in those who, though able, are apparently too slack to shoot.

Trains run to Runemede from Paddington *12.30, 1.15,* 2.30, 3.45. Or from Waterloo to Wraysbury *11.50, 12.40, 2.10,* 3.10, 4.7.—Yours, etc.,

H. J. HENDERSON, Hon. Sec.

The "Guyoscope."

DEAR SIR, — In order to bring the affairs of the "Guyoscope" to a conclusion, we have decided to place the remaining copies in the hands of the Librarian (who has kindly consented to take charge of them) that they may be sold for the benefit of the Million Shilling Fund. By this means, all who wish to secure copies will still be able to do so.—We remain, etc.,

THE COMMITTEE OF THE "GUYOSCOPE."

University of London Athletic Union.

DEAR SIR,—With your kind permission, I should like to say a few words about the University Sports to be held on June 27th. As will be seen on reading the posters already forwarded, *all Hospital men,* whether Uuiversity or Conjoint, are eligible for these sports. But I wish it to be clearly understood that they are not designed to in any way interfere with or take the place of the United Hospital Sports. It is the object of the University by these sports to make all students connected with the University feel that they have a bond in common, and this object will soon be further realised by the starting of University Football and Cricket Clubs. Now, as hospital men are predominant both in numbers and athletic prowess, it is obvious that without cordial support from the hospitals this idea of representative

University athletics is bound to fall to the ground. So I sincerely hope that there will be a large entry for these sports, and that in the future men will be willing to turn out for football and cricket.

One question may naturally be asked, and that is, Will the Polytechnics be included in this scheme? I may say unhesitatingly that they will not. No posters, circulars, or information of any description concerning the Athletic Union, have been sent by me to any of the Polytechnics. In this way a number of men, undesirable from a social point of view, will be excluded. It may sound snobbish, but it is obviously necessary to keep the "tone" of the athletics at a proper height, to render them as successful as they deserve to be, and nowhere is this more important than in athletic sports. So I hope that all hospital men will do their best to turn up and bring their friends.

Tickets may be obtained from the honorary secretaries of the various hospital athletic clubs.

In conclusion, I should like to say that, being a hospital man myself, the interests of the hospitals in these athletics will always be most jealously guarded by me, and I shall always be glad to answer inquiries from anyone to the best of my ability.—I remain, yours faithfully,

St. Mary's Hospital, J. H. MEERS,
Paddington, W. Executive Sec. U.L.A.U.
3rd June, 1906.

A Query.

Sir,—I beg, through your columns, to enquire if the rules of the constituent clubs of the Clubs' Union are made with the intention of putting the procedure and business of such clubs on a recognised working basis, or if they are made simply and solely because it is customary for clubs to have rules.

In the case of the Debating Society, I take it that the latter reason for the existence of its rules holds good; for but two days' notice was given of that society's last general meeting, instead of the seven days which its rules require.

This view is strengthened by the fact that, in spite of a protest against the authority of a general meeting illegally convened, the secretary proceeded with the business of the election of officers.

Trusting that to this letter there may be a reply,—I remain, sir, yours, etc.,

Guy's, June 13th, 1906. "DRUOFLAT."

Sir,—I should like to call attention to the unbusiness-like manner in which the affairs of the Debating Society are transacted. On Thursday, the 7th inst., a general meeting of the society was held, and such important business was on the agenda as an alteration of the rules and the election of officers. Since seven days' notice (as required by the rules of the society) was not given, what passed at the meeting must be ratified by another general meeting called in a proper manner. Apart from the waste of time occasioned in the present instance, it must be quite evident to members that to allow the secretaries to call general meetings without giving proper notice would open the way to many serious irregularities. I wish to make no reflection on the intentions of either of the secretaries, as I believe they have acted in good faith, but I would suggest that in future, as a matter of principle, they would do well to observe the constitution of the society.—Yours faithfully, "TIGHE."

Novelties.

The "Shufflebotham" Sick Feeder.

We do not know if that is its correct title, but the article we refer to is a new type of sick feeder made from the designs of Dr. Frank Shufflebotham, of Newcastle-under-Lyme. It is a neat little jug of glazed china with an inclined lip, instead of the usual teapot-like spout which most of us have at one time or other sucked. Its advantages are obvious. To begin with, it is superior in appearance to the ordinary glass feeders—a consideration of some importance to a sick person. Then it is very easily cleaned; its surface is not scratched so easily as that of a glass or enamel feeder, and it can stand very high temperatures, and so is easily sterilised. It is also cheaper than the glass article.

Sister Naaman, who has taken the opinion of her patients on it, declares that it is a most useful and suitable feeder, and that the only faults—both easily remedied—which those who have used it have so far discovered are its small size and the absence of a handle, which makes it rather inconvenient to hold when filled with hot fluid. The feeder can be obtained from Messrs. Adderley & Co., Ltd., of Longton, who are the manufacturers.

A Good Lubricant for Catheters.

By T. Brice Poole, M.D.

It is well recognised that the majority of lubricants composed of fatty substances. combined with various antiseptics in common use in genito-urinary surgery, are subject to many disadvantages, and amongst them may be noted the following:—(1) When an instrument covered with a greasy substance is put into an antiseptic solution, such as perchloride of mercury, the grease prevents the solution from penetrating to the surface of the instrument. (2) Lubricants of that nature are not antiseptic in themselves, as has been demonstrated in the case of carbonised vaseline, and for this reason are liable to become infected if exposed to the air. (3) The surface of gum-elastic instruments is liable to become roughened by the use of these fatty substances owing to the varnish, with which these instruments are impregnated, being to a certain extent soluble in them. Fats, too, have a deleterious action upon instruments made of rubber. In my opiniona lubricant devised by Dr. Oscar Kraus of Carlsbad, a few years ago, and now largely used on the Continent, is subject to none of these disadvantages.

The formula published by him* is as follows:—

℞ Gum Tragacanth ... ... 2·50 grammes
Glycerine ... ... 10 ,,
Aqueous Solution of Carbolic Acid (3%) 90 ,,
Triturate in the cold.

This forms a substance of thick syrupy consistence, which is readily soluble in water. For this reason a catheter can be quickly cleansed after use by immersion in tepid water, and can be disinfected by being placed in an antiseptic solution. This lubricant is not only aseptic but antiseptic, and there is little fear of its becoming infected if exposed to the air. In all respects an excellent lubricant, acceptable and soothing to the patient's mucous membrane, to the surgeon it is an agent, safe, efficient, and reliable, that not only answers its purpose, but also promotes and facilitates the cleansing and preservation of his gum-elastic and rubber catheters. Its mode of use is very simple, it being sufficient to dip an inch or two of the extremity of the sterilised catheter into the material. In the course of the passage of the catheter the adherent lubricant will spread itself over the shaft of the instrument without using the fingers for that purpose. It will be found especially serviceable where catheterisation has to be entrusted to the patient himself, or to an untrained attendant.

It can also be used for lubricating the finger in making rectal or vaginal examinations, and for lubricating pessaries previous to their introduction. Not being a *grease* it is of course unsuitable for lubricating the joints of metal instruments.

At my request, Messrs. Allen & Hanburys, Ltd., have recently prepared "Kraus's Catheter Lubricant" in a form convenient for use, and it may be obtained from them.

47, Valkyri Road,
Westcliffe-on-Sea.

* "Nouvel enduit pour sondes." Annales des Maladies des Organes Genito-urinaires. Janvier, 1899.

Aedun Bread.

There are so many varieties of patent breads on the market, all of them of a more or less high standard, that the customer is rather perplexed to know what to buy. One of the newest brands is "Aedun Bread," which is made by the Aedun Flour Company, of 103, High Street, Ramsgate, from special flour which contains a large percentage of crushed nuts. This bread has, therefore, a high nutritive value, and compares very favourably with the many rival brands on the market. In appearance it is more like cake than bread: it is very light, with an excellent taste, reminding one of the old-fashioned crumbly whitey-brown cottage loaf, but possessing a nutty flavour which is very pleasant. It cuts easily, and makes excellent toast. Aedun bread, therefore, is a brand which can be honestly commended. The sole London agent at present is the Bowes Model Bakery, Palmer's Green, N., whence samples and further particulars may be obtained.

Muiracithin.

This is a preparation of fluid extract of Muara-puana, a Brazilian plant, which is said to possess powerful aphrodisiac properties, and lecithin, combined with liquorice powder, and gum. It is put up in the form of pills, and has been highly praised by Prof. von Leyden of Berlin, and others, in the treatment of neurasthenia. Samples and literature may be obtained by medical men on application to Messrs. Reitmeyer & Co., of 63, Crutched Friars, E.C., who are the London agents.

Sport.

Cricket.

GUY'S v. BEXLEY ASYLUM.

Played at Bexley, on Saturday, June 2nd, and left drawn. Bexley won the toss and made a good start, scoring 130 for the first two wickets, Mitchell, a left-hander, in particular playing well. The closure was eventually applied at 228 for 7 wickets. Tolhurst was the most successful of the Guy's bowlers, securing 3 wickets at a moderate cost. Guy's made a good attempt to obtain the runs in the time, but ultimately were hard put to it to make a draw of it, Jamieson and Ingram coming to the rescue and keeping their wickets up. Tolhurst, Morres, Munden and Covell all batted well for their runs. Score:—

BEXLEY.

H. B. Goddard, run out...	46
H. J. S. Mitchell, c Jamieson, b Hunot	96
G. H. Everest, c Gibbons, b Tolhurst...	40
W. Benger, c Jamieson, b Morres	5
W. Naylor, c Morres, b Tolhurst	1
C. P. Keenan, c Clarke, b Tolhurst	2
Dr. Evans, b Morres	3
H. Dyson, not out	25
Extras	10
Total	*228

* Innings declared closed.

Dr. Brown, R. N. Lunn and Brown did not bat.

GUY'S.

A. M. Tolhurst, c Evans, b Everest	26
H. F. Morres, c Dyson, b Everest	35
M. M. Munden, c Evans, b Everest	34
G. C. Covell, c Keenan, b Mitchell	41
F. C. Hunot, b Everest	2
H. V. Gibbons, b Everest	20
W. T. Clarke, b Everest...	15
P. V. Pedrick, b Everest	1
W. Ingram, not out	19
F. Kahlenburg, c Naylor, b Everest	1
S. W. Jamieson, not out	6
Extras	13
Total	213

GUY'S v. NORBURY (12 aside).

Played at Norbury on Whit Monday. For Guy's, Munden and Morres made a fine stand for the third wicket, adding 123 before Munden was bowled. He

played fine forcing cricket, his driving being particularly good. Morres went on batting steadily and well after Munden's departure, and looked certain for his hundred, when he was unfortunately run out. Eventually the innings closed for 259. Guy's never looked in danger of being beaten, but failed to get their opponents out in time. Score:—

GUY'S.

G. C. Covell, b Whiting	0
H. V. Gibbons, b Johnson	17
M. M. Munden, b Shoobridge	72
F. Morres, run out	79
E. L. Norton, c Wilson, b Whiting	14
P. Smith, c Hicks, b Shoobridge	17
S. W. Jamieson, b Johnson	17
W. Ingram, c Whiting, b Shoobridge	10
W. T. Clarke, c Johnson, b Shoobridge	21
F. C. Hunot, not out	1
F. Kahlenburg, b Shoobridge	0
L. J. Davies, absent	0
Extras	11
Total	259

NORBURY.

M. C. Dahl, c Norton, b Kahlenburg	15
H. C. Plummer, b Morres	22
P. F. Wilson, c Munden, b Kahlenburg	68
W. E. Hobbs, c Norton, b Clarke	9
V. A. J. Hicks, c Jamieson, b Clarke	18
H. K. Whiting, b Kahlenburg	1
F. L. Johnson, not out	36
J. Hammill, c Smith, b Kahlenburg	15
J. H. Knight, c Smith, b Kahlenburg	26
C. A. Shoobridge, not out	6
Extras	8
Total	224

A. E. Flower and J. Macaldin did not bat.

GUY'S v. GRANVILLE (LEE) (12 aside).

Guy's had their strongest team out for this match, and won easily. Barnett won the toss, and sent Riches and Chase in to bat on a perfect wicket. Two wickets fell for 40, but Barnett and Munden put on 95 before Munden was bowled in attempting to drive. He again batted very well, and is a wonderfully improved bat. After the latter's dismissal, Barnett went steadily on until he reached his century (his third for the Hospital this summer), and then hit out at everything, until, with the score 377, he declared. He played perfect cricket up to his century, but afterwards tried to get himself out; and purposely gave one or two chances, which the Granville men refused to take. His best partner after Munden's dismissal was Tolhurst, who batted well for 30 not out.

Le May batted well for Granville, and for a time it seemed as if they would succeed in making a draw of it, but Kahlenburg won the match just on time by taking the last two wickets in one over.

Extras on both sides were very heavy, byes, curiously enough, amounting to fifty on each side. Score:—

GUY'S.

N. V. Riches, b Groves	13
G. Chase, c and b Austin	15
M. M. Munden, b Lowis	73
E. Barnett, not out	154
P. Smith, b Groves	17
H. V. Gibbons, b Lowis	17
A. M. Tolhurst, not out	30
H. Archer, lbw, b Lowis	4
Extras	54
Total	*377

* Innings declared closed.

W. Ingram, W. T. Clarke, S. W. Jamieson and F. Kahlenburg did not bat.

GRANVILLE.

L. R. Havers, c Munden, b Kahlenburg	4
R. S. Le May, c Tolhurst, b Jamieson	46
J. P. Clarkson, c Munden, b Chase	18
Major Lowis, b Kahlenburg	6
W. Austin, b Jamieson	21
P. P. Lincoln, c Barnett, b Riches	13
F. E. Lander, b Riches	4
H. L. Temple, b Jamieson	6
H. A. Levinson, b Kahlenburg	16
S. A. Walker, lbw, b Riches	0
C. E. Williams, not out	10
Groves, b Kahlenburg	0
Extras	64
Total	208

GUY'S v. THESPIDS.

Played at Honor Oak Park on Friday, June 8th. Smith and Gibbons gave the Hospital a good start, scoring 90 for the first wicket, and for the second time in the week Barnett was able to declare with a score of over 300. The innings was chiefly notable for another big score by Barnett, who is in wonderful form at present, and can do nothing wrong. This was his sixth innings for the Hospital this season, and his fourth century. The Thespids were very weak in batting, and fell easy victims to Kahlenburg and Jamieson, who bowled really well though. The former secured three wickets for 13, and the latter seven for 13. Score:—

GUY'S.

P. Smith, b Woodhouse	40
H. V. Gibbons, c Staton, b Blaker	46
M. M. Munden, lbw, b Woodhouse	0
E. Barnett, not out	128
G. C. Covell, c & b Staton	27
W. Ingram, c Longden, b Blaker	16
W. T. Clarke, not out	21
Extras	27
Total (5 wickets)	*305

* Innings declared closed.

S. W. Jamieson, F. C. Hunot, W. Doll, and F. Kahlenburg did not bat.

THESPIDS.

P. S. Woodhouse, b Jamieson	6
F. Hayton, c Barnett, b Kahlenburg	0
H. Bleackley, c Covell, b Jamieson	9
R. Selby, b Jamieson	0
H. Mills, b Jamieson	5
M. Wigan, b Kahlenburg	0
H. Lane, b Jamieson	1
E. A. Barkley, b Jamieson	0
E. Longden, b Kahlenburg	5
E. Dennison, b Jamieson	0
R. S. Bennett, not out	0
Extras	12
Total	38

GUY'S v. WESTMINSTER.

INTER-HOSPITAL CUP TIE.

Being drawn a bye in the first round, Guy's met Westminster in the second round at Chiswick on Monday, June 11th. Barnett won the toss and sent Riches and Smith in to bat in perfect weather. A good start was made, and the way paved for a long score before both batsmen were dismissed in quick succession. Barnett now joined Munden, and a long stand was made, 209 being added before a separation was effected, Munden being bowled in trying to drive. He played very good cricket, although favoured by a certain amount of luck. His success this season shows what keenness and constant practice at the nets can do, and is thoroughly well deserved. Barnett, soon after completing his century, retired. He made his runs without giving a chance, and is in wonderful form at present. This was his third consecutive century for the Hospital, and fifth this season. The remaining batsmen hit at everything, Archer and Gibbons putting on runs at a tremendous pace, until Barnett declared, leaving Westminster three hours to bat in. For Westminster a very good stand was made for the second wicket, but on Chase effecting a separation, Jamieson and Kahlenburg soon finished off the innings, leaving Guy's easy winners.

London have now to be met, and if the team can only keep up the form they are showing at present, they should win; but cricket is a curious game, and the best efforts of all will be needed to make a victory certain. Scores:—

GUY'S.

N. V. Riches, b Barker	52
P. Smith, run out	27
M. M. Munden, b Barker	101
E. Barnett, retired	126
G. Chase, b Barker	19
H. V. Gibbons, not out	30
H. Archer, c Hayward, b Johnstone	36
Extras	15
Total (for 6 weeks)	*406

*Innings declared closed.

A. M. Tolhurst, P. Pedrick, S. W. Jamieson, and F. Kahlenburg, did not bat.

WESTMINSTER.

R. Elworthy, b Kahlenburg	0
G. G. James, c & b Chase	21
R. S. Barker, c Riches, b Kahlenburg	33
L. Johnstone, b Kahlenburg	8
A. D. Mitchell, b Jamieson	18
A. W. Hayward, b Jamieson	2
K. F. Davison, b Jamison	0
S. M. Wood, b Jamieson	8
H. Galloway, b Kahlenburg	0
G. F. Carr, not out	4
H. S. Kingston, b Kahlenburg	0
Extras	28
Total	122

Athletic Club.

The Annual Sports were held on Saturday, June 2nd, at Honor Oak Park, in cold and rather threatening weather, a heavy storm falling during the progress of the last race, but fortunately ceasing before the time came for the presentation of prizes. Over this ceremony Mrs. R. P. Rowlands graciously presided, and Mr. Clement Lucas, as in previous years, concluded the proceedings with a brief speech in his usual genial manner. With regard to the sports themselves, no very striking performances were accomplished, but a fairly high general standard was attained. Perhaps the throw of 104 feet 7 inches with the 16-pound hammer, by J. L. Rankine, was the most creditable achievement. H. N. Eccles, who was as usual well-trained, was successful in the 220 yards, quarter mile, and half-mile. The donkey race, won by H. Stott, by a short neck, afforded all the entertainment that is annually expected of it, though the absence of Mr. Higgens as a rider was regretted by everyone.

The attendance, in spite of the weather, and impending Whitsuntide holiday, was slightly better than in previous years, over 400 visitors being present.

The Committee of the Club take this opportunity of thanking those members of the staff, and others, who kindly assisted as judges, etc. These were, Dr. Fawcett, Dr. French, Messrs. C. H. Fagge, R. P. Rowlands, P. Turner, and H. Desprez.

The results of the various events were as follows:—

100 YARDS.—1, Haycraft; 2, Browning; 3, Gool. Time, $10\frac{4}{5}$ seconds.

PUTTING THE SHOT.—1, R. Rankine (rec. 2 feet), 35 feet; Archer (rec. 2 feet), 34 feet 8 inches.

HALF-MILE.—1, Eccles; 2, Greene. Time, 2 minutes 8 seconds.

HIGH JUMP.—1, Wright (rec. 1 inch), 5 feet $2\frac{1}{2}$ inches; 2, Browning (scratch), 5 feet $\frac{1}{2}$ inch.

120 YARDS HURDLES.—1, Gool; 2, Browning Time, $19\frac{3}{5}$ seconds.

THROWING THE HAMMER.—1, J. L. Rankine (scratch), 104 feet 7 inches; 2, R. Rankine (rec. 10 feet), 104 feet $3\frac{1}{2}$ inches.

1 MILE.—1, King; 2, Greene. Time, 4 minutes 54 seconds.

220 YARDS.—1, Eccles; 2, Rankine; 3, Roberts. Time, $25\frac{2}{5}$ seconds.

150 YARDS VETERANS' RACE.—1, E. Morgan. Time, $16\frac{4}{5}$ seconds.

QUARTER-MILE.—1, Eccles; 2, Roberts. Time, 53 seconds.

LONG JUMP.—1, J. L. Rankine (rec. 2 feet), 20 feet 6 inches; 2, Stone (rec. 6 inches), 18 feet $9\frac{1}{2}$ inches.

THREE MILES.—1, Evans; 2, King; 3, Stone. Time, 17 minutes 43 seconds.

HONOR OAK PARK CORONATION SCURRY STAKES.—1, Stott; 2, Berry; 3, Mandell.

Guy's Hospital Rifle Association.

The team went down to Runemede on Wednesday, 6th inst., to shoot for the Armitage Cup, and amassed a total of 449. We were unfortunately deprived of the services of Cooper, whose duties prevented him from turning out, and Ticehurst failed to do himself justice as he was out on the district the whole of the previous night. The conditions, though ideal from a "day-in-the-country" point of view, were far from perfect for shooting, as there was a tricky wind and considerable mirage. Scores:—

L. L. C. Reynolds	84
G. A. Blake	82
R. E. French	81
H. J. Henderson	72
C. B. Ticehurst	69
E. P. Minett	61
	449

Mary's made 516.

Inter-Hospital Sports.

The contest for the Challenge Shield and Cups took place at the Crystal Palace Track, on Friday, June 8th, before a very small attendance of spectators.

The afternoon afforded little satisfaction to the few Guy's supporters who were present. The brothers Rankine repeated their former successes in throwing the hammer and putting the shot, and R. M. King made a plucky race in the mile, and gained second place, but beyond this our representatives were unable to score any points towards the Shield. However, some amends were made for our want of success in the contest for the Shield, by the notable victory of our tug-of-war team, who reaped the reward of steady practice in the Pavy Gymnasium, by bringing the Cup for the first time to Guy's.

The team consisted of R. G. Oram (Captain), S. H. Browning, F. C. Endean, H. Archer, J. Pryce Davies, T. Crump, J. L. Rankine, W. E. Williams.

London University Athletic Union.

The first Annual Sports of this Club will be held at Stamford Bridge, on Wednesday, 27th June, and we hope that many entries will be sent in from Guy's. We understand that a tug-of-war team is undergoing arduous training, and wish them all success.

Entry forms and tickets may be obtained of our own Hon. Secs.

Pass List.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, FINAL FELLOWSHIP, MAY, 1906.—P. P. Cole, W. M. Mollison, A. M. Webber.

UNIVERSITY OF LONDON, M.B. AND B.S. EXAMINATION, MAY, 1906, for Internal and External Students.—*Honours.*—G. Cockcroft (distinguished in Medicine and in Surgery, University Medal), T. B. Layton (distinguished in Surgery), H. F. Vandermin (distinguished in Medicine) *Pass.*—A. Alcock, F. Alcock, R. J. Bentley, P. C. P. Ingram, T. C. Pocock, T. Turner. *Supplementary Pass List, Group I.*—F. P. Hughes.

B.S. EXAMINATION.—*Honours.*—R. A. Greeves. *Pass.*—G. W. Russell.

Solution for Commentary in Medicine.

Post-Mortem Appearances.—This was a case of tubercular peritonitis. Weight of body, 6 stone 8 pounds. Emaciated. Adhesion of lung to diaphragm on both sides. Lungs small and œdematous; no trace of old or recent phthisis. Bronchial glands calcareous. Heart, 6½ ounces, normal. Abdominal viscera, peritoneum glistening, and the retro-peritoneal tissue very œdematous. Numerous calcareous nodules. Many organised adhesions, some of the omentum, which, however, was not thickened, and not drawn up, and some connecting coils of small intestine together. Diaphragm adherent to liver and spleen. Small intestines gathered close to the vertebral column. Calcareous masses, some of them glands, but most of them "distinctly adventitious." Small intestines of less than normal calibre, and neither hypertrophied nor dilated. Numerous chronic contracting ulcers with blackened edges, and transverse in direction, tuberculous in origin and in many places the lumen of the gut so much contracted as to admit with difficulty the little finger. There were also fistulous communications between adherent coils, with consequent short circuiting. Colon normal and free from ulceration. Liver 43 ozs., normal. Gall-bladder contained several gall-stones. Spleen 4 ozs., not lardaceous. Kidneys 8 ozs., deposits of urates at tips of pyramids, not lardaceous, normal. Pelvic organs normal; in particular no tuberculous infiltration of Fallopian tubes.

Solution for Commentary in Surgery.

This was a case of malignant growth of the head of the pancreas, with enlarged glands in the mesentery.

Death.

ROUTH.—On June 4th, at 20, Clarence Parade, Southsea, from pneumonia, after 10 days' illness, Evelyn Mary, the wife of Charles F. Routh, M.D., aged 29.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

MR. SYMONDS' generous offer to contribute one-fourth of the amount required to wipe off the Clubs' Union debt has had the most satisfactory and gratifying results, and the list of subscriptions which appears in this issue shows how general has been the response to this final appeal. That the appeal has been so successful is due in a great measure to Mr. Symonds' generosity, which has roused others to contribute; to the co-operation of his colleagues on the staff and of old students of the Hospital; and last, but not least by a very long way, to Mr. Croucher's active work in conducting the secretarial duties in connection with the appeal. Donations have been received from members of the staff, from students, past and present, and from friends interested in the Clubs' Union, to all of whom members will feel grateful for this help. The total amount required has been subscribed, and the Clubs' Union may be congratulated, therefore, on the success of the appeal—a success which, it is worth while to reiterate, enables the Committee to wipe off the long-standing debt, and start with practically a clean sheet.

EVERYONE, but more especially the junior students who have come to know them better, will regret the resignation of Dr. Spriggs and Dr. David Forsyth, who are leaving us at the end of the present session. Dr. Spriggs goes to St. George's, and Dr. Forsyth to Huxley's Hospital, Charing Cross, both to join the Staffs of these two institutions as Assistant Physicians. During their association with the Medical School in the capacity as Demonstrators of Physiology, both of them have earned the respect and appreciation of a large number of students who have attended their classes, and the congratulations on their promotion will be as general as the regret that such promotion entails, unavoidably, the breaking of their connection with us. We are sure, however, that being Guy's men, they will continue to take an interest in our affairs, and in the Debating and Physiological Societies, with which they have been more or less intimately associated, just as we feel sure they will welcome those of us who may in future attend demonstrations at their respective hospitals.

THEIR resignation brings about two vacancies in the Physiological Department The one has been filled by the appointment of Mr. A. F. Hertz as Assistant Demonstrator of Physiology —an appointment on which both Mr. Hertz and the Medical School are to be congratulated. The other vacancy has not yet been posted.

THE Annual Prize Day Garden Party will be held on Wednesday, the 4th of July, when the prizes will be distributed by Sir W. Cameron Gull. The Pantheon-like erection, which has been gradually assuming definite proportions at the farther end of the Park, against the Dissecting-room walls, is so far on the way towards completion that the speculation as to what purposes it may ultimately be devoted is no longer so vague as it used to be. The Park itself is looking as fresh and magnificent as its somewhat curtailed boundaries permit. In short, as Micawber would have said, everything is ready for Prize Day. But there is a possibility that the lawn might lose its freshness if the practice of using it as a parading ground is not stopped. After the garden party, perhaps, the authorities will allow us to bring out deck chairs and sun ourselves in the middle distance in "sweet-do-nothing" after a hard morning at the back. But just at present they consider that the GAZETTE might fitly intimate that the proper camping-out place in the Park is on the seats, and not on the grass—till Prize Day is over.

THE Treasurer's Gold Medals in Clinical Medicine and Clinical Surgery have been awarded to Mr. P. P. Laidlaw and Mr. G. Cockcroft respectively. It is, we understand, a long time since the medical medal has been carried off by a fourth year's man. We tender our hearty congratulations to both gentlemen.

NEXT week sees the election for representatives on the Council of the Royal College of Surgeons. The present election is one in which Guy's men will feel actively interested, since two gentlemen, whose names are associated with this hospital, are soliciting the votes of their colleagues. Mr. Symonds' record is so well known that our readers need not be reminded of the claims he has upon their support, while we have already given the outlines of Professor Wright's career. We wish them both success in their campaign. Guy's has only two representatives on the Council, namely, Mr. Lucas and Mr. Golding-Bird, and it seems reasonable, in view of the fact that it is one of the largest medical schools in the Metropolis, that it should have three. Manchester has none, and Professor Wright's candidature is therefore entirely justifiable. We trust, under the circumstances, that both gentlemen will have the whole-hearted and cordial support of all Guy's men.

THE two new appointments which have been posted in the Colonnade, the "Student Demonstrators of Operative Surgery," should prove of great value to the fortunate senior students who may obtain them. As there seems to be some doubt as to the qualifications desired by the Medical School, it may be mentioned that the appointments are open to senior students who have done the three guinea course of operative surgery, and who are working for higher examinations. Their duties as demonstrators will be to assist the Demonstrator of Operative Surgery in this course, which in future will be the only course given, as it has been decided to abolish the half-guinea Conjoint course. The appointment should prove of material assistance to those working for higher examinations, owing to the opportunities it offers for acquiring greater familiarity with operative surgery than the average student is likely to obtain by attending the usual course, and it should therefore lead to keen competition.

IN the world of sport there has been little to chronicle during the past fortnight, but what little there has been is well worth mention. The second tennis team has secured (for the first time, we believe) the Junior Tennis Cup, after an exciting afternoon during which they beat Mary's in the final. The first tennis team has been less fortunate, losing their second match, and so falling out of the running. The Rifle Club has had some encouraging days at Runemede, and we are glad to notice that the Secretary reports that the shoots are attracting more attention from students than they have hitherto done. The final shoot for the Armitage Trophy will be held on Tuesday, July 10th, and the United Hospitals and our own Meetings will take place on the same day. Owing to want of space we are unable to publish the full programme for the day in this issue, but it will be found posted in the Colonnade and on the notice-boards in the smoking-room.

IT is with much pleasure that we draw attention to the Garden Fête and Fair, which will be held in the grounds of "The Cedars," Belmont Hill, Lee, on Thursday, July 12th, in support of an endeavour to endow in perpetuity a bed in this Hospital. The fête will be opened at 2.30 p.m. by Mrs. Cosmo Bonsor, and admission will be by ticket (which may be obtained on application to Mr. Reaside). The fête has been organised by Miss Sparks, assisted by a number of ladies and gentlemen, and the programme which has been issued is a most attractive one. There will be the usual number of booths, together with various side shows, entertainments, concerts, and competitions, and the Guy's Minstrels have promised their assistance. Students who may wish to help—and we are asked to state that any assistance in the management of the side shows will be appreciated—should communicate with Miss Sparks, 89, Lee Road, Blackheath, or with Mr. Reaside, from whom programmes and further particulars may be obtained.

AT the Annual Meeting of the Incorporated Medical Practitioners' Association, held at the Trocadero Restaurant, on June 14th, Dr. A. Percy Allan, of Crogdene, South Croydon, was elected President of the Association for the ensuing twelve months.

Pass List.

University of Oxford.

DEGREE OF DOCTOR OF MEDICINE.—W. E. Robinson.

University of Cambridge, Easter Term, 1906.

DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY.—G. H. K. Macalister (St. John's), W. H. Robinson (Downing), G. A. Ticehurst (St. John's).

DEGREE OF BACHELOR OF SURGERY.—H. C. Cameron (St. John's), C. F. Fothergill (Emmanuel), E. C. Hughes (Clare), A. S. Morton Palmer (Jesus).

SECOND EXAMINATION FOR MEDICAL AND SURGICAL DEGREES.—H. Lee, C. F. Searle.

THIRD EXAMINATION FOR MEDICAL AND SURGICAL DEGREES.—Part I.: F. A. Barker, E. B. Hinde, B. K. Nutman, C. H. Rippmann. Part II.: H. J. Clarke, R. Davies-Colley, C. F. Fothergill, A. S. Morton Palmer, W. H. Robinson, A. Walker.

The Regulation of Nutrition by the Cerebral Convolutions.

By CHARLES MERCIER, M.D., F.R.C.P.,
Physician for Mental Diseases at Charing Cross Hospital.

Disorder in Insanity is always threefold :—disorder of conduct; disorder of mind; disorder of nutrition. Of these, disorder of conduct is ordinarily by far the most important; disorder of mind is usually so much the most conspicuous, that it is regarded as synonymous with insanity —a very erroneous view; and disorder of nutrition is in many cases insignificant. It is universally held that the fundamental disorder, of which the three disorders above mentioned are symptomatic, is disorder of the mode of working of the cerebral convolutions, or some of them. As the function of the cardiac ganglia is to issue motion to the muscles of the heart in such quantity, in such proportions, at such intervals, that the movements of the heart are adapted to the conditions of the organism which contains the heart; so the function of the highest ganglia—the convolutions—is to issue, to the musculature of the whole body, motion in such quantity, in such proportions, and at such intervals, that the movements of the whole organism are adapted to the conditions of the world which contains the organism. As the cardiac ganglia control the movements of the heart, so do they regulate its nutrition; as the convolutions regulate the conduct of the organism, so do they regulate the nutrition of all its parts. "An army," said Napoleon, the greatest of all generals, "fights on its belly"; and the ability of a great commander is shown, not less in his skill and resources in organising the commissariat, than in his strategical dispositions. The cerebral convolutions are the commander-in-chief of the forces of the organism; they form the government of the somatic territory; they are the Directorate of the human body corporate. A moment's consideration shows that the nutrition of every part of the body is regulated in proportion to that of all other parts. Were it not so, there would be nothing to prevent one arm or one leg attaining gigantic dimensions, out of all relation to the size of the other limbs; or remaining of infantile size. We see in certain diseases, such as acromegaly, cretinism, microcephaly, that the proportion is sometimes disturbed, so that certain parts grow to excess, or in defect. This regulation of the nutrition of all parts, in due relation with that of all other parts, must be carried on by a central organ in which all parts are represented. Cretinism is certainly, acromegaly is probably, and microcephaly is with equal probability, due ultimately to the absence from the blood of some important constituent, or the presence in it of some noxious constituent in excess. But seeing that, in all these maladies, different parts of the body are differently affected, it is impossible to escape the conclusion that, to whatever materies morbi they may ultimately be due, the proximate cause is disorder of the regulating apparatus. But in cretinism and microcephaly, though different parts of

the body are differently affected, yet all parts of the body are affected; and hence, in the regulating apparatus, all parts of the body must be represented. It is probable that all parts of the body are to some extent represented in cerebral centres of comparatively humble rank, but it is certain that all parts of the body are not represented with any approach to equality until centres of very high rank are reached. Even in the convolutions, *e g.*, in the "motor area," the representation is such that that of a limited part of the body very greatly preponderates. There is, therefore, good reason to suppose, from *a priori* considerations, that the centres which co-ordinate justly, and harmonise, the degree of nutrition of the several parts of the body, are of very high rank. My own belief is that they are the highest of all. They are those centres, or regions, or areas, of the convolutions, whose activity is manifested in conduct and accompanied by the operations of mind. Those who are in the habit of regarding the fore-brain or the after-brain as the true and only "psychic centres," will be shocked at having such gross material functions attributed to these elevated regions; and so, the worshippers of a monarch, a hero, a saint, or a philosopher, may be scandalised to find the object of their devotion eats and drinks, sweats and sneezes, like other people. But nerve tissue is nerve tissue. The material functions of nerve cells and fibres cannot be different in kind in one place from what they are in another. If, in the cord and the pons, they receive, re-combine and emit motion, so do they in the fore-brain and the hind-brain. And the emitted motion must go somewhere, and produce, wherever it goes, a material effect. It must initiate, or modify, or cancel motion somewhere; and if anywhere, why not in the tissues of the body at large, with which its nervous connections are so intimate and indubitable?

That certain peculiarities of nutrition have cerebral accompaniments, and others a cerebral origin, has long been recognised. That the formation of adipose tissue is more free in persons of placid disposition than in the eager and the peevish, is a matter of common repute. With the tears of grief, the dry mouth of anxiety, the anorexia of wrath, we are all familiar. The deep ridges that appear on the nails remind us for months afterwards of some severe storm of emotion that we have passed through, and that affected at the time the metabolism of the cells of the ungual matrices. I have placed on record a case in which all the nails of both hands and feet were shed after an attack of acute mania. The sweaty, stinking skin of many of the chronic insane communicates an ineradicable odour to the wards in which several of such persons pass their days. It should not, therefore, be a matter of surprise if we find occasionally much more profound anomalies of nutrition connected with insanity, and seemingly having no other explanation than the same disorder of the function of the convolutions, which exhibits itself otherwise in those disorders of conduct and mind that go to make up insanity.

C. H., æt. 61, a tall, big man, weighing fourteen stone six pounds, had for some weeks been becoming more and more miserable, evincing delusions that he had lost his money, reputation and character, and at length refused food on the ground that he could not pay for it. He was a wealthy man. He had slept scarcely at all for a week, and very badly for several weeks. His organs were sound, and bodily health good. A few doses of sulphonal procured him sleep, and thereupon he began to eat his food, his misery diminished, and he began to have glimmering doubts as to whether his money was really all lost; but, at the end of a month, the difficulty began again, and increased until, at the end of the second month, he utterly refused food, and had to be fed with the tube. At the same time, he became wakeful again, and hypnotics were again administered. At the tenth week he was treated with morphia—half a grain once a day—and a striking improvement took place. He admitted he was a rich man; he resolved to take his food; he became cheerful, slept well, and was an altered man. When the morphia was discontinued, he relapsed; and when it was recommenced, he again improved. This improvement lasted some ten days, when he again began to worry about his money. But he still took his food, and he was fed abundantly and super-abundantly. He had four hearty meals a day, and three pints of peptonised milk between meals; but still he steadily lost weight.

By the end of the fourth month, the morphia had been increased to one and a half grains per day, but the improvement that occurred on first taking it had altogether vanished. He became thinner and thinner, in spite of abundance of food, and he started a habit of roaring at the top of his voice, as if in agony, especially when required to take food.

During the next month he steadily deteriorated in mind and body. He became more demented, and he lost flesh continually, although, in addition to abundance of food, he had all kinds of extras, including a tumbler of cream with whiskey in it. His weight by this time had diminished to nine stone four pounds. He now had one grain of morphia every night, and was much worse when it was discontinued.

At the end of six months, his weight had gone down to eight stone twelve pounds, little more than half his normal weight, and he was extremely emaciated. He continued to eat copiously. Tr. Opii. was substituted for the morphia, and twenty drops given three times a day. It certainly tranquillised his mind, diminished the roaring, and procured him sleep at night. At the end of the sixth month, however, it lost its effect, and was discontinued. Thereafter he became worse; again refused food, and was fed with the tube. His delusions became exaggerated. Not only was he poor, but he was all dirt, all mud, and asked for a knife to scrape himself away. Enough food was administered to him to fatten to gross obesity a man in good health; but he continued to lose weight, until, at the end of the ninth month, he weighed only eight stone. Oddly enough, although he now resisted with all his might the operation of feeding, he would get up in the night and steal the night nurse's food. He wasted more and more, and at the end of the

year he died of inanition. During all his illness he passed abundance of urine of normal quality, showing that his food was digested and absorbed into the blood; but, when presented to the tissues, they refused to assimilate it. Since this refusal was general throughout the body, it must have been due to a generally-acting cause, and it would seem that there can be but two causes that answer to this description. Either the blood must contain some ingredient which destroys the nutritive value of its plasma, or prevents the tissues from absorbing nutriment; or a necessary condition of nutrition is normal innervation of the tissues, which was wanting in this case. The probabilities seem vastly in favour of the latter hypothesis. That normal innervation is a necessary condition of normal metabolism is shown by the effects of section of nerves, damage to spinal cord and to the lower cerebral centres. It is only logical to suppose that the highest of all nerve regions possess functions which differ from those of lower nerve regions, not in kind, but in elaborateness, in the directness of their action on the rest of the body, and in other respects. I suppose no one would now contend that the function of the highest convolutions is purely psychical; indeed, it seems to me that such an hypothesis is, strictly speaking, not conceivable. Their function must be an elaboration of the function of lower centres—the function of these centres raised to a higher power. And one function of these lower centres is certainly concerned with metabolism. The general, the universal, failure of nutrition, in this case, indicates, as before contended, a cause as general. There was abundance of evidence, in the conduct and in the mental aberration, that the function of the highest cerebral regions was defective; and it seems to me that the failure of the food, which was taken so abundantly into the stomach, and absorbed so abundantly into the blood, that its failure to nourish the tissues was due to a failure of the "trophic" function of the convolutions.

There is an alternative. May there not have been a mediastinal tumour pressing on the thoracic duct, and so preventing the nutrient material from gaining access to the blood? Against this is the fact that the hypothesis was thought of during the life of the patient, and there was no evidence of any such tumour. It is true that such a tumour, if small, might have presented no physical signs; but if it obstructed the thoracic duct, that duct, which was the vessel for such very copious quantities of fluid, must either have become enlarged, behind the obstruction, to a size which would have been easily perceptible to physical examination, or it must have burst. If it had burst, the escaping fluid would either have given rise to a tumour, probably an abscess, which could not have remained concealed; or it would have been absorbed, and *cadit quæstio*. There was no *post-mortem* to verify the absence of such an obstruction, but in view of this reasoning, such a cause can certainly be excluded.

The foregoing case, though perhaps the best characterised, is by no means the only case that has been under my care in which the patient has wasted away in spite of very copious feeding, and in the absence of any evidence of diabetes, or cancer, or other recognised causes of extreme emaciation. In all these cases, the existence of insanity indicated loss by the cerebral convolutions of one important part of their functions. In my opinion the persistent wasting was a part of the insanity. It was due to loss of function of the same parts, whose other losses of function were evidenced by the loss of conduct and of mind. The failure of the tissues, to assimilate the pabulum offered to them in such abundance, was as much a part of the insanity as the shedding of the nails off fingers and toes, in the other case alluded to, was a part of the insanity. It was as much a part of the disease as the shedding of the epidermis after scarlet fever is a part of the disease. If it is asked why the trophic defect was so much more considerable in this case than it usually is in cases that are in other respects very similar, I have no answer to give. Enthusiastic localisers will postulate a special region of convolutions devoted to a trophic function and to no other. To this hypothesis I am unable to subscribe. There are cases of insanity in which mind is much affected, and delusions are wildly extravagant, and yet conduct is affected scarcely at all. Other cases there are in which conduct is grossly distorted, and yet mental unsoundness does not appear to exist, except in so far as the extravagance of conduct is unappreciated. There is therefore nothing inconsistent with our experience of the common manifestations of disorder of the functions of the convolutions, in the spectacle of one of these functions suffering out of proportion to the others. In this case it can scarcely be said that there was disproportion. Conduct, mind and nutrition were all deeply disordered. Supposing all three disorders to be dependent on disorder of function of the same convolutions, then this case is not anomalous. The case that is anomalous, and that requires explanation, is the ordinary case in which conduct and mind are greatly disordered and nutrition suffers little.

Guy's Colonial Club.

THE annual dinner of the Guy's Colonial Club was held in the Oak Room at the Trocadero Restaurant on Saturday, June 16th, Mr. Charters Symonds occupying the chair. There was a good attendance of members and their friends, amongst the guests being Colonel Elcum, I.M.S., Mr. F. Turner, and Staff Surgeon May, R.N. The usual toasts were honoured, the Chairman proposing "The Colonies," to which Messrs. Giesen and Leipoldt responded; Mr. Williams, "Guy's Hospital," to which Mr. O'Brien replied; and Mr. McEvedy, "The Colonial Club," replied to by the honorary secretaries, Messrs. Welchman and Mandel. The Chairman proposed the health of the guests, on whose behalf Mr. Turner responded, and Mr. O'Brien that of the Chairman. The musical part of the programme was contributed by Messrs. M. Ball, O'Brien and P. S. Price, to whose efforts a great deal of the success of a pleasant evening was due. The secretaries for the ensuing year are Messrs. Welchman and R. Stout.

Life and Mechanism.

Some Replies to Dr. Haldane.

DEAR SIR,—In response to your invitation, will you allow me to point out what seems to me two fundamental errors in Dr. Haldane's reasoning? In the first place, the scientific student is never called upon to "explain" the phenomena he observes; and in the second place, biology is not susceptible of separation from the general realm of nature knowledge.

The broader the view in such a case the better; therefore, let us look back to our own particular beginnings. At one time, no doubt, the place now occupied by the solar system was occupied by a mass of "ether." Ether may be taken to mean matter in a state of apparent quiescence, whether composed of one gas or of many we do not know. Somewhere in this mass condensation occurred, and a nebula arose; the hitherto unpalpable matter became palpable; from out the apparently undifferentiated ether the nebula acquired an individuality—a being. Is it conceivable that we shall ever "explain" the origin of this nebula; is it not necessary to accept the position so well described by Professor Karl Pearson, and to recognise that our knowledge of nature is limited by "an impenetrable veil of sense-impressions?" Observation and record are open to us, but "explanation" ought to be blotted out of the scientific vocabulary.

From the origin of the single individuality of the nebula down to the present time, every event takes its place, in scientific conception, in an orderly sequence; sun, planet and satellite follow one another naturally. Coming now to the separate story of our world, astronomy, geology and natural history tell us that the same orderly sequence of events has proceeded without interruption; complexity has succeeded simplicity, the solitary being of the earth has been succeeded by the countless individualities that now occur on its surface; but are we called upon to "explain" their origin any more than that of the nebula? Not only do I answer the question in the negative, but I assert that, scientifically speaking, we have no grounds on which to attempt the feat. Personally, I would as soon discuss the rival merits of homœopathy and allopathy, as the disputed claims of the "vitalistic" and the "mechanistic" theories of biology; not theories really, but unscientific speculations.

And now as to the attempted separation of biology from the rest of science. Dr. Haldane says: "In the world as it is assumed to be in the sciences of physics and chemistry, matter and energy are regarded as two distinct forms of existence, the association together of which, in any particular form or degree, is accidental." If this were the foundation on which physics and chemistry are built, there would be good ground for putting biology on some other footing, but so far as I know this is not so. The existence of matter is postulated to account for a vast number of corresponding sense-impressions; but who, in the scientific world, has been compelled to postulate "energy," apart from matter, as a "distinct form of existence?" We can well conceive matter approaching a state of rest—that is, without motion—in the interstellar space; we cannot well escape from the Hibernian expression, "latent heat"—anglice, motion at rest; but where, in scientific experience, is there room for the conception of "energy" (motion, force, vitality, call it what you will) apart from matter? Every form of "energy," from the heat and light of the nebula up to our own complex vitality, thought and consciousness, is, in my mind, inseparably bound up with matter. All these manifestations appear to me to take their places in our records as qualities, as results of the varying states of matter, and are, therefore, scientifically, absolutely inconceivable apart from matter.

It remains to say a word about working hypotheses, often held to be indispensable to the scientific worker. As generally understood they are, to my mind, always useless and nearly always misleading; they have no relation with theories built on observations, such as Darwin gave us; they are founded on the mistaken duty to "explain," and therefore hinder the student; they discourage unbiassed observation of nature. One example will suffice; Dalton substituted his atomic theory for the observed combining proportions of chemistry, in order to "explain" what had been observed, and to give a working hypothesis. The knowledge of combining proportions is invaluable—as a working hypothesis—their "explanation" is impossible. But the atomic theory is not merely useless, it enables the schoolmaster to draw, on the blackboard, wholly imaginary atoms of various "elements," with supposititious hooks and eyes for combinations; this fills the boy's mind with unrealities and warps it; atoms inevitably develop into "ions" and "electrons," till finally the amateur, Mr. Balfour, can "explain" the nature of "realities" to the British Association in the simple phrase, "electricity is matter," showing the sad fate of a working hypothesis. This is not a deliberate digression, it is meant to illustrate the fact that if anyone in authority provides a false conception, under the guise of a working hypothesis, it will act on the mind of the unwary as did the study of fortifications on the mind of Corporal Trimm; even if they be, like that worthy man, "non hobby-horsical *per se*."

There is no more urgent need at the present time than the bringing of the medical student into line with the general scientific front; this is why I have ventured to criticise Dr. Haldane's propositions so freely; they are, to my mind, reactionary.—Yours truly,

Bromley, June 10th. AGNOSTIC.

SIR,—In the two lectures delivered by Dr. Haldane on the question of Life and Mechanism, he reviewed briefly the history of the progress of Physiological Science, and showed how it had been advanced mainly by two opposing schools of thought, namely, the Mechanistic and the Vitalistic.

At the conclusion of his second lecture, having previously announced the decease of the Vitalistic theory, he proclaimed the approaching doom of the Mechanistic, and urged the foundation of an entirely new school for the purpose of attacking the problem of life in a new and more logical way, taking cognizance of all recent advances in science bearing upon the question.

At the outset such a task seems insuperable, for it would appear that the problems which the Mechanists acknowledge as impossible of solution, seem inevitably to fall into the category of those which the Vitalists explain by their theory; and even if the word "Vitalistic" be not used, yet the actual explanation is in reality "Vitalism" under a new name.

But on further consideration the difficulty diminishes when the principles of Herbert Spencer's philosophy are brought to bear upon it, for however the subject is approached, one soon realizes oneself face to face with the eternal conflict between the Relative and the Absolute. The cause of the difficulty lies in the fact, that the Scientist has not yet learnt to recognise the word "unknowable," and has, as the aim and object of his life's work, and research, the hope of establishing a "*cause*," instead of expending his efforts on the illimitable field of studying closely and more correctly the "*effects*."

To illustrate the difference briefly, the circulation of the blood can be considered. In 1628, Harvey published his great work, describing the circulation, and, as a student of "effects," he has few equals; he worked patiently, making observations of the movements of the heart, which, as he himself describes, "I found the task so truly arduous, so full of difficulties, that I was almost tempted to think (with Fracastorius) that the movements of the heart were only to be comprehended by God;" nevertheless, by a large number of experiments, he was able, at last, to describe these movements, and indeed the entire circulation, in such a manner that his book stands untouched to the present day.

Since Harvey's day, countless observers have made fruitless endeavours to find the "cause" of the circulation, and although, as a result of their efforts, the histology and chemistry of heart-muscle and its nerve supply have been enormously extended, yet the object of their research has entirely failed and is as elusive to-day as it ever was.

Again, a large number of present-day observers, both in the physiological and in the psychological laboratories, are giving their life's work to the investigation of the "nervous impulse;" and yet, in spite of all the work that has been done, the term, to-day, is merely a "symbol" expressing an observed but unknowable fact; but, as a result of their work, every day brings new facts to light, which may eventually unravel the amazing complexity of the minute anatomy of the nervous system.

These examples show pretty clearly the essential difference between cause and effect; for, whereas the effects are knowable, and are the only all-important factors for life and science, the causes, on the other hand, are, as will be explained, both unknowable and absolutely inconsequent.

The following passage is taken from Herbert Spencer's "First Principles," and it should stand as a sign-post to all scientific research:—

"If x and y are two uniformly connected properties in some outer object, while a and b are the effects they produce in our consciousness, then the sole need is that a and b and the relation between them shall always answer to x and y and the relation between them. It matters not to us if a and b are like x and y or not. Could they be identical with them we should not be one whit better off; and their total dissimilarity is no disadvantage."

In other words, he emphasises the all-importance of the relations between various effects, which can be observed and recorded, and the absolute inconsequence of the subjective causes which are impossible to ascertain.

Now, all knowledge is essentially merely relative, as can be clearly proved when its method of reception is considered. Firstly, all our information reaches the sensorium from the outer world, that is to say, that the mind is originally a blank, or, as Plato observes, "the mind is a book of which the senses are the scribes." Now, the nature of the sensation perceived depends entirely on the kind of end-organ stimulated, and this is again entirely independent of the mode of stimulus. For instance, however the optic nerve be stimulated, a sensation of light is always perceived, hence the varying quality of the normal stimulus to the eye—the ethereal waves—can themselves only help in the discrimination of colour. But in the study of sensation perception the greatest difficulty is the explanation of the power of analysis of sensation. Clinically and histologically, nerve-cells and their processes differ only in size; their arrangement and structure being practically identical; hence, on the physico-chemical theory, the nature of all nervous impulses is identical; yet when the sensation of a nervous impulse arises into consciousness, its kind, quality, direction and intensity are perceived instantaneously, and whether it be a ray of light, a musical sound, or the prick of a pin, this same physico-chemical impulse is differentiated and recognised.

Thus it would seem that "effect" is the objective representation of a subjective "cause," and it is just the "objective representations" which science recognizes and defines; whilst it is about their inter-actions and inter-relations on which she can speculate and form hypotheses; but the hope to discover the *cause* of a muscle contraction, the *nature* or *cause* of a thought, the ultimate *nature* of life, or the *cause* of the universe, are vain strivings of an impotent and infinitesimal mind.

Physiology, and indeed all science, must recognize the futility of all endeavours to penetrate the veil of the absolute, and so the new school must leave behind its "Mechanistic" and "Vitalistic" explanations of life itself, and turn its back for ever on the study of

"causes"; concentrating all its energies on the unravelment of the endless complexities of the relations between "effects." J. L. A.

DEAR SIR,—Much of the controversy as to how Science should regard vital phenomena results from a confusion as to the meaning of a so-called "scientific explanation." Strictly speaking, Science "explains" nothing; it merely describes concisely. A stone pushed over the edge of a cliff falls to the ground; a river flows downhill. An unscientific savage has to remember separately both these and many similar facts. A scientist will describe these various phenomena by a conception such as gravitation, and will have only one thing to store in his mind. Thus the laws of science are a great economy in thought. But when one loosely talks of "explaining" the fall of a stone, all that can be really meant is that we are capable of describing it in familiar terms (*vide* Karl Pearson).

Since it would be such a saving mentally, it is surely the aim of science to describe the phenomena of the living and the non-living in like terms. It must be admitted that in our present imperfect observation of vital phenomena it is sometimes impossible to describe and classify them upon the same basis as non-vital phenomena. But the endeavour of science must be to obtain a common basis from which to describe both life and non-life.

Instead of this, Dr. Haldane proposes to divorce the two studies of biology and physics, so that they argue from different premises and have different fundamentals; with the probable result that it would be more difficult to comprehend both, and that each would labour without much assistance from the other.

But it is not only on this philosophical ground that Dr. Haldane's proposals may be criticised. I venture to submit that his standpoint of teleology is logically unsound. For instance, teleology teaches that the tiger is striped in order to conceal himself in the long grass. The fallacy is obvious when we discover that the tiger in the Zoo still retains his stripes. Undoubtedly the tiger's ancestor in the jungle, who first chanced to develop stripes, had an advantage over his less fortunate fellows, and therefore probably survived; but that is a very different story.

Teleology has been responsible for many errors. For example, it used to be held that provisional callus was thrown out as a temporary scaffolding in order to keep the fragments together whilst the shaft of the bone was being repaired, until Hamilton pointed out that in those fractures—*e.g.*, patella, olecranon, neck of femur—where provisional callus would have been most beneficial there was no provisional callus at all, and moreover, that the formation of callus depended on the irritation and displacement of the periosteum, and not a bit upon the needs and desires of the organism.

Dr. Haldane's hope "to extend biological conceptions to what we at present regard as inorganic phenomena" suggests, if one may be pardoned for saying so, the good man who was convinced that the tides had nothing to do with the pull of the moon, but existed to help us to get our barges up and down the River Thames.—I am, yours faithfully, K. H. D.

Guy's, June 22nd.

Appointments.

House Appointments.

The following appointments have been made by the House Committee upon the recommendation of the Medical Committee:—

House Physicians.—Messrs. G. Hamilton (Dr. Taylor); H. S. Knight (Dr. Pitt).

House Surgeons.—Messrs. W. Reeve (Mr. Lane); A. V. Maybury (Mr. Dunn).

Out-Patient Officers.—Messrs. L. G. Davies, E. M. Harrison, G. H. K. Macalister, E. Bellingham Smith.

Assistant House-Surgeons.—Messrs. W. P. Purdom (Sir Alfred Fripp); G. N. Bartlett (Mr. Steward); G. W. Nicholson (Mr. Fagge); H. F. Vandermin (Mr. Rowlands).

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants.—Messrs. A. Alcock, A. S. B. Bankart, R. Davies-Colley, T. B. Layton, A. S. Morton Palmer, W. Welchman.

Dressers in the Throat Department.—Messrs. J. S. Bookless, A. Zorab, S. W. Daw, E. Wragg, G. W. Dryland, C. B. Ticehurst.

Assistant Surgeons' Dressers.—Messrs. E. P. L. Hughes, J. B. Dunning, J. Walker (Sir A. Fripp); F. J. Wheeler, H. B. Carter, C. S. E. Wright (Mr. Steward): E. L. M. Lobb, G. F. Syms, W. Johnson (Mr. Fagge); E. R. Stone, F. J. Cutler, D. Reynolds (Mr. Rowlands).

Medical Ward Clerks.—Messrs. I. R. Florence, T. Evans, M. E. Ball, L. T. Baker, R. G. Chase, L. T. Dean, C. G. Douglas, L. K. Edmeades, A. W. Ewing, J. F. Young, H. O. Brookhouse, H. E. H. Mitchell, K. H. Hole, A. E. Lees, P. S. Price, L. Mandel, S. S. Brook, V. P. Hutchinson, H. R. Mullins, H. Chapple, F. W. Hogarth, R. P. M. Roberts, R. C. V. Edsall, C. H. Mills.

Surgical Ward Clerks.—Messrs. H. R. Bastard, T. Stansfield, H. W. Heasman, H. I. Janmahomed, V. Townrow, C. F. Searle, H. Lee, W. E. Wallis, S. L. Randolph, A. E. Rayner, A. R. Khalakdina, M. M. Adams.

Post-mortem Clerks.—Messrs. A. Pearson, A. W. Eyles, C. A. L. Mayer, M. E. Ball, L. T. Baker, L. K. Edmeades (July 1st).

Clerks in the Skin Department.—Messrs. A. W. Eyles, C. A. L. Mayer.

Obstetric Dressers.—Messrs. T. E. Ashdown Carr, G. F. Stebbing, W. P. H. Munden (July–August).

Some Pathological Specimens with Interesting Clinical Histories.

Demonstration in the Gordon Museum, by Dr. FAWCETT, May 12th, 1906.

CASE 1.—*Carcinoma of the sigmoid flexure; fistulous communication with bladder.*—W. C., æt. 52 years, was admitted under my care in January, 1905. He first felt unwell in February, 1904, when he became somewhat constipated. In May he had an attack of pain in the side, which was said to be pleuritic in origin. In September, 1904, he noticed he was getting thinner, and there was continued, though slight, irregularity in the action of the bowels. In October the liver was noticed to be enlarged, and shortly before entering the hospital the patient began to suffer from frequency of micturition. The main features in the case were (1) the progressive deterioration of health and the enlargement of the liver, associated with symptoms of intestinal disturbance, and (2) frequency of micturition.

Remarks.—The patient was a very sober, industrious man, and there was no reason to suspect that the enlargement of the liver was the result of cirrhosis, or of syphilis, or of any of the "blood" diseases. The insidious onset of the illness and the cachexia suggested that the increase in size of the liver was probably, due to secondary deposits of a malignant growth, the primary seat of which was "latent." The situation of the primary growth was most likely in the stomach, the pancreas, or the intestine, and of them all the intestine was the most favoured, because, previous to the present illness, the patient had never suffered from constipation, and when admitted there was some degree of abdominal distension. The frequency of micturition was explained either by the primary, or a secondary, growth, involving a coil of intestine in the pelvis, probably the sigmoid flexure, and directly irritating some of the pelvic nerves, or the bladder itself. One other curious feature about the patient was that he suffered from very severe attacks of sweating during the months of September and October, although later they were not so pronounced. The pathological specimens are here before you. The liver appeared during life to be quite smooth; you see the substance of the organ is almost entirely replaced by growth. Here is the intestine, showing a cancerous stricture of the sigmoid flexure firmly adherent to the bladder; a piece of horsehair is passed through the perforation, by means of which the cavity of the bladder communicated directly with the growth in the sigmoid flexure.

Course and treatment.—After a few days in hospital the patient developed more evidence of intestinal obstruction. It was therefore decided to perform colotomy, and so obviate a death from acute intestinal obstruction. Another reason for performing the colotomy was that the day before the operation the patient told us he had passed some "gas with his water," and on smelling the urine it was found to have a fæcal odour, so that clearly a vesico-intestinal fistula had formed. The result of the colotomy was to make him more comfortable, and to relieve his urinary symptoms, for although he developed some cystitis and ascending nephritis, yet during the remainder of his life he did not pass any more intestinal contents per urethram, and the frequency of micturition was also lessened.

CASE 2.—*Acute yellow atrophy.*—The patient was a healthy, sober coachman, of about 40 years of age. Three weeks before his death he was seized with an attack of jaundice; there was no marked pain, and the condition was regarded as due to a simple catarrhal jaundice. A few days later a rash of a morbilliform type was observed on the body and was accompanied by pyrexia. The doctor who was looking after the patient thought the disease might be measles, although neither at the time, nor after, was any source of infection traced. The rash and the pyrexia subsided together, and the patient improved, except for the jaundice. Fourteen days from the onset of his illness, abdominal pain and vomiting came on, and then it was noticed that the hepatic dulness was considerably diminished. The doctor then came to the conclusion that the case was one of acute yellow atrophy, and I think we may congratulate him on the diagnosis. The patient remained mentally clear up to the time of his death. The urine became exceedingly dark, and the motions, which were at first clay-coloured, were afterwards stained with bile. The pulse rate was normal. The day before his death some petechial spots appeared on the extremities, and three days before death leucin and tyrosine crystals were obtained from the concentrated urine.

Remarks.—There was nothing at first in the case of this patient, any more than in most who develop acute yellow atrophy, to show that he was not suffering from simple catarrhal

jaundice; however, the appearance of a morbilliform rash, with pyrexia, pointed to something more serious; but it was not until about a week before the patient's death that the area of liver dulness was found to be very small. The presence of leucine and tyrosine in the urine confirmed the diagnosis, and when you look at the liver you will see there is no doubt about it. The liver is small and shrunken; it weighs only twenty-eight ounces. Immediately after death it presented the typical features of acute yellow atrophy with "yellow" and "red" areas; the little cavities which you see now on its surface are putrefactive cysts of post-mortem formation.

One of the most interesting features of the case, apart from the diagnosis, was that the patient never showed any cerebral symptoms, nor did he exhibit many hæmorrhages, or vomit the dark black stuff that so many cases do. It was Bright who first recognised the set of symptoms which constitute this disease, and which are usually included under the term toxic jaundice, although of the poison, or its source we know little or nothing. Certainly there is no relationship to syphilis or alcohol. It is more common in women than in men, and most of the cases occur in patients who were, like the one we have been talking of, healthy previously. The duration seldom exceeds three weeks, the length of the illness in the patient whose symptoms I have related to you.

CASE 3.—*Acute peritonitis with fat necrosis.*—The patient was a female, æt. 59, who was under the care of Dr. Hale White. She developed acute peritonitis, and died within six days of the onset of the illness. She was said to have had a similar, though less severe, attack of pain five months previously. On admission, the abdomen was extremely tender, and there were the usual signs of peritonitis. She improved at first, but became worse later. The abdomen was explored, and acute general peritonitis found, but the cause was not determined. No doubt the possibility of an "appendicular" origin was discussed, and in view of the patient's age and sex, and of the attack of pain five months before the present attack, it is probable that gall-stones with cholecystitis and suppuration or perforation of the gall-bladder was considered among other causes. Acute pancreatitis is another condition to be borne in mind in doubtful cases; this disease is said to occur more frequently in people of middle age; its onset is often sudden, and in some cases it closely simulates a condition which may result from perforation of a hollow viscus, while in others it resembles rather an intestinal obstruction. On the other hand, some of the cases of acute pancreatitis do not correspond in type to either one or the other of these conditions. The situation of the pain in most abdominal lesions in the earlier stages is median, so that is not of much help at first in locating the source of the inflammation, although later the pain becoming most marked in some particular region, may aid us in arriving at a correct diagnosis of the seat of the lesion. The laparotomy disclosed the presence of peritonitis in this case, but not its cause; the result of the autopsy was equally negative.

Remarks.—The curious feature at the autopsy was that a wide-spread peritoneal "fat necrosis," which is said to be always associated with an acute inflammation of the pancreas, existed; the pancreas did not show anything abnormal, either to the naked eye or under the microscope; so some fat-splitting ferment from somewhere, possibly of bacterial origin, had invaded and split up the sub-peritoneal fat. The yellow and white patches of fat necrosis show extremely well on the piece of omentum which I have brought for your inspection. The condition must be an extremely rare one; I have brought it to your notice to-day not on account of its rarity, but to draw your attention to the pancreas as a possible source of the inflammation of the peritoneum in cases where the origin is doubtful.

CASE 4.—*Acute pneumococcal septicæmia.*—The patient was a boy, æt. 17, who was admitted under Dr. Pitt with symptoms of acute peritonitis, the illness having commenced four days previously with sharp pain in his side. On admission, the temperature was 103°, and pulse 100; the abdomen was distended and rigid, moving very little, the condition pointing to an early peritonitis. The physical signs in the chest were mainly of pleural origin. Shortly after admission the boy became delirious; he commenced to vomit persistently, and died within forty-eight hours of the time of entering the hospital.

The main features of interest in the case were (1) the presence of peritonitis of doubtful origin, (2) the acute character of the illness. Apparently the pleurisy had preceded the peritonitis, and was not secondary to an abdominal lesion, such as a perforated appendix cæci, or gastric ulcer. The conclusion arrived at was that the two conditions, the pleural and the peritoneal, were part and parcel of the same infection. The pneumococcus is well known to occasionally give rise

to severe generalised infections, and Dr. Pitt suggested this as a probable explanation of the present case. This diagnosis turned out to be correct; cultivations made from the peritoneal and pericardial fluid, and also from the blood, gave pure growths of pneumococci; cultivations made from the spinal meninges and cerebro-spinal fluid gave pneumococci contaminated with another organism. The results of the post-mortem examination were as follows:—The pleuræ were covered by recent buttery lymph. There was acute pericarditis, and a recent mitral endocarditis; the peritoneum was in a condition of early inflammation. I have brought you the colon for inspection because I want you to see the very severe inflammation of the intestine which may result from infection by the pneumococcus. The mucous membrane is acutely inflamed and swollen, with patches of membrane on it in places; there are many submucous hæmorrhages; the outer coats are thickened by inflammatory exudation. The colon was almost certainly affected at an earlier stage of the illness than the peritoneum, and it was probably through the intestine that infection of the peritoneum took place. The case will serve to remind you that an acute peritonitis which is not due to any of the common causes, may be pneumococcal in origin. Several cases of pneumococcal peritonitis have been recorded in which the patients have been cured by laparotomy. There is a case described by Dr. Taylor in the Transactions of the Clinical Society for 1904, in which pneumonia first developed, followed by an empyæma, in addition to the purulent peritonitis. Both of these latter conditions were treated surgically and the child was nearly well when the case was reported, the abdominal wounds being quite healed.

CASE 5.—*Typhoid fever, cholecystitis and perforation of the gall-bladder.*—The patient was a woman, æt. 24, who was admitted under Dr. Pitt, seriously ill with abdominal pain and vomiting, which had come on suddenly three days previously, and had been followed by diarrhœa. Her temperature was 102·6°; pulse 108, and respirations 26 per minute. There was tenderness, with considerable increase of resistance over the right side of the abdomen from the costal margin, to the level of the umbilicus. Three days later a swelling could be seen projecting below the liver and moving with respiration, which Dr. Pitt thought was the distended gall-bladder. In a day or two the spleen was found to be enlarged; the temperature chart during the first week exhibited an average height of 102° to 103°, the pulse rate was comparatively low, 96 to 100. There were no "spots" to be seen at any time. These features suggested that the patient was probably suffering from typhoid fever, with cholecystitis and a distended gall-bladder, and the diagnosis was confirmed a few days later by a positive Widal's reaction. The question of draining the gall-bladder was considered on several occasions, but the patient was so seriously ill all the time she was in the hospital—she only lived fourteen days from the onset of the attack—that no surgical measures were attempted.

At the autopsy, a local peritonitis with bile-stained exudation was found to exist in the right upper half of the peritoneal cavity; this was due to a perforation of the gall-bladder, which is situated, as you can see, at the junction of its middle and lower thirds. The walls of the gall-bladder are thickened and œdematous. There were numerous typhoid ulcers in all stages of development in the ileum. Cholecystitis and perforation of gall-bladder are rare complications of typhoid fever, and their presence is only rarely diagnosed. In Dr. Rolleston's book on Diseases of the Liver, it is stated that out of 1,006 cases of typhoid fever which were admitted to the Imperial Yeomanry Hospitals in South Africa in 1900–1901, in only one case were the symptoms sufficiently well marked to require anything to be done for their relief or to be recognised beyond doubt. The associated abdominal distension, and the severe illness of the patient, often renders detection of an inflamed and dilated gall-bladder in typhoid fever very difficult; still, it is a complication to be remembered, especially in that it may be remediable by surgical treatment.

CASE 6.—*Spinal caries; angular curvature of the spine; Addison's disease.*—A man, æt. 49, was admitted under my care in January, 1904. In 1898 he had been in the hospital under Dr. Pitt, with a "compression paraplegia," from which he recovered. When he was discharged, a well-marked angular curvature was present. *Five years later* he began to feel weak. Six weeks before readmission to hospital he had an attack of influenza, after which date he went rather rapidly downhill, and began to suffer from attacks of vomiting. The diagnosis of Addison's disease was obvious, for in addition to his feeble condition the skin of the body was of a coffee-and-milk tinge; there were patches of pigment in his mouth and numerous little round pigmented areas scattered over the trunk and limbs. The patient said that the pigment spots had developed during

the last two or three months. The special feature of interest in this case is the occurrence of Addison's disease in a man with an old angular curvature. The portion of the spine that I show you is a good example of the result of caries of the vertebræ. The suprarenals are both, as you can see, enlarged by a tubercular fibro-caseous deposit.

Addison's disease is, as you are aware, far more often the result of a tubercular infection of the suprarenal glands than of any other cause. In many cases it is the only seat of infection by tubercle which can be found in the body; in others the tubercular process has spread into the glands from a neighbouring focus. Of such foci an old caries of the spine is the most common. Therefore, the reason I have brought these specimens to show to you to-day is, to remind you that in the case of a patient with an angular curvature, the supervention of indefinite symptoms, such as an inexplicable weakness or attacks of sickness, are to be looked upon as danger signals, possibly indicative of what, so far as we know at present, is a fatal lesion, viz., disease of the adrenals. Some day, perchance, the injection of tuberculin undertaken in connection with the determination of the "opsonic index," may lead to a favourable result, for inasmuch as Addison's disease is so often due to a local lesion there would appear to be a better opportunity of doing good by this treatment than in many cases of tubercular disease of internal organs.

CASE 7.—*Acute pneumonic phthisis.*—A man, æt. 19 years, came under the care of Sir Cooper Perry, having four days before admission been suddenly attacked with pain in his side. Six months previously he had had an attack of pleurisy. On admission, his temperature was 103°, pulse 100, and respirations 26, and there were signs of consolidation of the right lung. The points of interest in the case were (1) the sudden onset of the illness, (2) the physical signs present, which suggested an acute lobar pneumonia. Careful observation, however, showed the presence of slight flattening at the right apex; the respiration rate was only 24–26 per minute, and there was a history of an attack of pleurisy a few months before. All these put together rendered the physician doubtful as to whether the case was one of simple lobar pneumonia, and later on tubercle bacilli were found in the sputum. The further progress of the case confirmed the diagnosis which was made, namely, "acute pneumonic phthisis." The physical signs did not disappear, the temperature remained high, varying from 100° to 104°, and the respiration rate comparatively low as on admission. Death took place a month after admission to hospital. At the autopsy, as you see in the specimen, the lung was found to be solid throughout as the result of a diffuse infiltration with caseous material. It is a most beautiful specimen; if you look closely at it you will see a focus of old disease at the apex; there are also old adhesions over the pleura. The moral of this case is "Don't be in a hurry to jump to conclusions." Always, when you are dealing with a case of lobar pneumonia which seems *very* obvious, just say to yourself, "Is it, after all, a lobar pneumonia?" That interval of hesitancy may be sufficient to make you look once more at the chest, and perhaps see some flattening over one apex, or perchance some other feature unusual in pneumonia.

Another condition I always try and remember when examining such a case is a pneumococcal empyæma, because a pneumococcal empyæma may, in its early stages, present signs distinguishable with difficulty from a lobar consolidation of the lung; at any rate, you would not diagnose it if you didn't remember the possibility, and as a result the note affixed to a specimen in our Museum (not an "empyæma case," however), might apply, "a life lost which, perchance, might have been saved!"

Now the form of phthisis shown in this specimen is the rarest of all, even of the acute types of the disease. There can be little doubt that the uniform solidification of the lung indicates a general infection from the first and as is usually the case, there is in this specimen a focus of old disease, from which the acute process started. In most cases of this type the length of life is short, four to six weeks, although in some the illness drags on and the case becomes a more chronic one. This young fellow, you will remember, lived a month after he was admitted to hospital, the whole duration of his illness being four weeks and a half.

CASE 8.—*Chronic intussusception.*—A man, æt. 39, was admitted under Dr. Bryant in August, 1905. His illness had started eleven weeks previously with an attack of abdominal pain, and bleeding from the bowel, which lasted about twenty-four hours; a three weeks interval followed, after which time another attack of the same nature commenced, and was associated with severe pain. Since this second attack the patient has had two or three seizures a week. During the paroxysms the abdomen became somewhat rigid; the patient suffered from tenesmus and was at times sick. On admission,

the abdomen was found to be quite supple, and nothing could be discovered to account for the symptoms recorded. A day or two after this the patient had an acute attack of pain, and passed two small motions without any blood in them. Three days later the patient had another attack, and blood was present in the motions; it was thought by some that an indefinite lump was palpable in the left hypochondrium. After another two days the patient had a more severe attack of pain, and an ill-defined mass was then felt in the left hypochondrium, which became more definite; much blood and mucus were passed per rectum. The diagnosis made was "chronic intussusception." Mr. Fagge removed the whole mass, and you can here see the growth projecting from and forming the apex of the intussusception. The patient is now, I believe, in the best of health and doing his work as usual.

Remarks.—A chronic intussusception is often very difficult to determine, for its signs and symptoms are so variable. Many of the cases are never even suspected. On the other hand, if the condition itself be borne in mind and not altogether forgotten, as I think usually is the case, a correct diagnosis might more often be reached, though in some it appears to be impossible. Like so many cases, the symptoms in this particular one were most indefinite at first, consisting of repeated attacks of colic, with no physical condition to account for it. Then the attacks of colic became more frequent, and were associated with the passage of blood, and ultimately an ill-defined tumour was detected. You might say that, after the account which I have narrated to you, the diagnosis was quite easy; but I assure you that, even in a case like this, the diagnosis is not altogether an easy problem. A tumour is felt in only about a half of these cases, and blood is passed in about the same number; in the absence of a tumour and of the passage of blood and mucus per rectum, it is almost impossible to see how a correct diagnosis could be reached.

In some cases the diagnosis may be aided by the observation of peristaltic movements trying to overcome the obstruction. The important features to bear in mind in doubtful cases are:—

1. The paroxysmal nature of the attacks, with decreasing intervals of freedom from pain.

2. The gradual failure in health of the patient as he becomes worn out by the pain and the diarrhœa, whereas in the early stages as soon as the pain is gone the patient feels quite well again.

These features were very well marked in the case of the patient I have been speaking of, and especially that he was becoming worn out and exhausted by the repeated attacks of pain. Indeed, from reading the report I should say that, had no operation been performed, he would probably have died from exhaustion, and not from the cancerous growth which was present.

Here is another specimen from the Museum of a chronic intussusception due to growth which was not, I believe, diagnosed; the symptoms were much of the same character as those I have just told you, but probably no tumour was felt.

CASE 9.—*Purpura hæmorrhagica; cerebral hæmorrhage.*—A young fellow, æt. 17, was admitted under Dr. Taylor for "purpura." Seven weeks previously his hands began to swell, and shortly after, his face. Ten days before admission his ankles became swollen, and a week later there was bleeding from the mouth, and many subcutaneous hæmorrhages appeared; epistaxis and hæmaturia followed on the day before admission. When admitted he was bleeding freely from the mouth and nose, and there were subcutaneous hæmorrhages everywhere; the hands and legs were œdematous. The urine contained a large amount of blood, albumen and casts. The next day the patient developed a left hemiplegia, which was followed in about twenty-four hours by a profuse hæmatemesis, from which he died. Thus there was a seven weeks' history of illness and a six weeks' history of bleeding. As no cause was discovered to account for the hæmorrhage the disease was labelled "purpura hæmorrhagica," and until we know something more about the conditions underlying these severe "purpuras" I suppose we must keep that name for it. At the autopsy numerous petechial hæmorrhages were seen all over the body. The stomach looked as if it were in a condition of acute inflammation with numerous hæmorrhages into the mucous membrane and submucous tissue.

Remarks.—One of the cerebral hemispheres, as you can see, is destroyed over a very large area by a hæmorrhage into its substance. The specimen is to remind you that cerebral hæmorrhage may be the cause of death in some of the "blood diseases," perhaps most commonly in leucocythæmia, although it does occur from time to time in scurvy and in pernicious anæmia, and as you see in this specimen in purpura hæmorrhagica. The other features of the case are those usually seen, and there is nothing to which I need specially draw your attention. The stomach and some of the other organs are

here to show you the very extensive bleeding that had taken place into their substance.

CASE 10. — *Distended and ulcerated gall-bladder; calculus impacted at neck of bladder. Cholecystectomy.*—A woman, æt. 61, was admitted under Mr. Lane on March 22nd, 1906. She had come to my "out-patients" on the afternoon of that day with the following somewhat indefinite history. During the summer of 1905, she began to feel ill and had considerable pain in her abdomen. The doctor who saw her found a swelling on the right side of the abdomen below the costal margin. The pain was better after a time, but the swelling remained. From this time until Christmas, 1905, she remained in a fair condition of health and was free from pain, but at Christmas the pain again returned and has remained more or less since that date, the pain being of a dull aching character. She had never suffered from an acute attack of colic and had not been jaundiced. On examination, an ill-defined somewhat pear-shaped tumour, of about three inches in length, was found to protrude below the hepatic margin on the right side; it moved slightly with respiration and could be readily shifted laterally in either direction; it was somewhat painful to pressure. The liver, the right lobe of which was enlarged downwards, appeared to be continuous with the swelling, and the edge of the liver was felt superficial to the tumour. The swelling was therefore thought to be a distended gall-bladder, distended as the result of a stone impacted in the cystic duct. The swelling was readily felt on bimanual examination, but it did not fill up the loin like a renal tumour often does, and it appeared to be on a plane anterior to the kidney. Again, it could not be moved up and down like a moveable or floating kidney. The swelling was too moveable, and its position somewhat out of the region which a tumour of the pancreas commonly occupies, nor was there any evidence to suggest that it originated in connection with the pelvic organs, or with the colon or other portion of the intestine.

The two points of special interest I wish to draw your attention to are:—

1. The persistence of the swelling, although after the first attack of pain the patient was free from pain for some three to four months. It is not by any means uncommon, for middle-age women in particular, to complain of pains of an indefinite and quite mild type, which are due to gall-stones, and yet which are thought to be of "gastric" origin, and in some of these so-called "dyspeptic" patients a dilated gall-bladder has been found when the abdomen has been palpated. In this case we know that the tumour was present for about nine months, and yet the patient was free from pain for a considerable interval. When the pain did return it was not of a "colicky" type, but a "worrying aching in the back."

Therefore do not forget the possibility that vague pains, especially in middle-aged females, often called "dyspeptic," may be due to cholelithiasis, and that if a proper examination of the patient be made the true cause of the condition may be discovered.

2. The character of the pain.—A gall-stone does not need to get into the ducts to cause pain. There are many people who have had stones in the gall-bladder for years, and yet not suffered from them in any way. On the other hand, probably most of the attacks of pain resulting from biliary calculi are due to irritation set up in the gall-bladder itself. There was no evidence in this patient that a stone had passed out of the bladder; there was only one stone in the sac and it was not facetted.

The condition of the gall-bladder we were unable to determine beforehand. It appeared unlikely, although not impossible, that there was an empyæma or an ascending cholangitis present, as the patient had no pyrexia and gave no history of rigors, but it was probable that, if a stone was the cause of the pain, the bladder would be found inflamed and ulcerated, for the stone had almost certainly been present for nine months or more. When the abdomen was opened and the gall-bladder exposed, a stone, about the size of a filbert, was found blocking the cystic duct at its origin, as you can see in the specimen before you. The inner surface of the gall-bladder is inflamed and scarred, and, therefore, the whole sac was removed, the cystic duct being ligatured at its commencement.

Change of Address.

Dr. R. Balderston, from 30, Park Road, Forest Hill, to 17, Westbourne Road, Forest Hill, S.E.

Dr. Stanley E. Denyer, C.M.G., from Queen's College, Cambridge, to 75, Gordon Mansions, Gordon Square, W.C.

Mr. Alfred Drewitt, L.D.S., from Eversleigh, Brighton Road, Purley, to Sobraon, Woodcote Valley Road, Purley.

Dr. A. R. F. Evershed, from Pinners' Hall, 15, Great Winchester Street, E.C., to 19, Harley Street, Cavendish Square, W.

Dr. N. Ivens Spriggs, from 1, Leyland Road, Southport, to 12, Wennington Road, Southport.

Sir Thomas Stevenson, from 160, Streatham High Road, S.W., to Sandhurst Lodge, 382, Streatham High Road, S.W.

Dr. C. F. Wakefield, from Lincoln Lodge, Horse Hill, Horley, to Waywell, Norwood Hill, Surrey.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Notes from Paris.

Choses Médicales.

During two winters passed in Paris I have acquired some knowledge of French medical matters, of which I have already given some account in the GAZETTE last year, in "Impressions of Paris Hospitals." A few more notes may be of interest now. Any medical man is welcome in a Paris hospital. Introductions to the staff appear to me to be hardly necessary. Anywhere, if you present your visiting card and ask in your best French to "assist at the consultations," you are bowed within the portals. The porter will probably present you to an "interne," who will in turn introduce you to the surgeon or physician to whom he is attached, and then you will see what is to be seen. As far as teaching is concerned, they are miles behind our teachers. In fact, I should say the French as a nation are very inferior teachers. They have no system; they never begin at the beginning; they never group things, and they are ever striving to reach quickly the end of their explanation, to which they like to give a dramatic touch. Tabulated facts are the last things a Frenchman thinks of. A joke about a concierge or a milliner's assistant is much more to the point! I suppose they would consider our teachers very dull.

Of Paris student life I have personally seen little or nothing, but from what I have heard, the British student is a very mild young man by comparison. The students' Christmas ball, if held in this country, would probably be raided by the police, who would come provided with raiment for the fair partners prior to their removal to the lock-up! Each hospital resident staff (the "internes") appear in some allegorical phantasy on these occasions. Last year, I believe, the "Cholera" was represented. Strange and weird was the description of it.

The course of medical study in France begins by passing the examination for the "Bachelier" in Arts and Science at a University, which confers the degree of doctor. Then the student joins a medical school, where he attends lectures, and dissects, and at the hospital or hospitals he "dresses" and otherwise studies his profession for four years. At the end of each year he passes an examination—written, oral and practical. He also, during this time, takes out special courses of lectures and demonstrations at one or more hospitals, and he acts as "extern," medical and surgical. This latter appointment is practically "ward clerk." At the end of his fourth year he can go in for the "doctorat." All are "doctors" now in France. There is no "L.S.A." Formerly there was a lower qualification, "officier de santé," but that is now done away with. For the "doctorat" there are five examinations to be passed and a "thèse" (subject chosen by candidate) to be written. The latter is the final step to having the degree of doctor conferred.

If the ambitious student wishes to hold the post of "interne," or resident in a hospital, he must not get qualified as doctor of medicine until afterwards. In other words, the resident appointments are held by men *sine diploma*. These posts are occupied for three or four years. There is a special competitive examination held every year for these, and in Paris there are only 200 "internes" among 5,000 students. Such were the figures given me by an old interne. A physician has one "interne" attached to his "service," a surgeon has several. Practitioners who have been "internes" note the fact proudly on their visiting cards, viz., "ancien interne des hôpitaux." In the hospital the internes are in authority during the absence of the staff. The surgical internes have the right to perform operations. Sending for the surgeon in case of any serious accident is at their discretion. I am given to understand that the Paris "internes," in the matter of surgical operations, have a much better time than any of our residents. Though actually without a diploma, an interne, as such, can sign a death certificate. The reason given for the internes being appointed *sine diploma* is that the staff are supposed to have greater control over them in that state.

FREDERIC VICARS, M.D.

May, 1906.

Clubs' Union Appeal.

(Received up to Thursday, June 28th, 1906.)

	£	s.	d.
Amount previously acknowledged ...	214	1	0
Rodolph A. Hankey, Esq.	25	0	0
The "Guyoscope" Committee	10	0	0
P. Horrocks, Esq., M.D., F.R.C.P.	5	5	0
H. Davies-Colley, Esq., M.B., F.R.C.S. ...	5	5	0
Sir Cooper Perry, M.A., M.D.	3	3	0
F. J. Steward, Esq., M.S., F.R.C.S. ...	3	3	0
A. P. Beddard, Esq., M.A., M.D.	3	3	0
A. F. Hertz, Esq., M.B., B.Ch.	3	3	0
Maurice Craig, Esq., M.A., M.D.	2	2	0
Herbert L. Eason, Esq., M.D., M.S. ...	2	2	0
C. H. Fagge, Esq., M.S., F.R.C.S.	2	2	0
G. Bellingham Smith, Esq., M.B., F.R.C.S.	2	2	0
Harry L. Pillin, Esq.	2	2	0
J. B. Parfitt, Esq.	2	2	0
Ernest B. Dowsett, Esq.	2	2	0
R. Balderston, Esq., M.B.	2	2	0
Arthur W. Ormond, Esq., F.R.C.S.	1	1	0
Herbert S. French, Esq., M.A., M.D. ...	1	1	0
P. Turner, Esq., M.S., F.R.C.S.	1	1	0
H. F. Bell Walker, Esq., M.B.	1	1	0
Hubert C. Visick, Esq.	1	1	0
J. E. Spiller, Esq.	1	1	0
F. Meadows Turner, Esq., M.A., M.D. ...	1	1	0
F. W. Rowland, Esq., M.D.	1	1	0
Major H. St. G. Hore, R.A.M.C.	1	1	0
A. H. Miller, Esq.	1	1	0
P. F. McEvedy, Esq.	1	1	0
George Eastes, Esq., M.B., F.R.C.S. ...	0	10	6
	£301	0	6

The Hospital Barber.

Nursing News.

MATRON'S OFFICE.

Nurse Rogers left the Hospital on June 5th, on completion of her three years' training, and Probationer Ferdinand was appointed to succeed her as Head Nurse in Martha Ward.

On June 11th, Probationer Price was appointed to succeed Nurse Parish as Head Nurse in Queen Ward.

On June 11th, Nurse Faull left the Hospital on completion of her three years' training, and Probationer Dudley was appointed to succeed her as Head Nurse in Bright Ward.

Probationer Sewell was also on this date appointed Head Nurse in Stephen Ward.

On June 14th, Nurse Leverton was transferred to Stephen, and Probationer Robins was appointed to succeed her as Head Nurse in Victoria.

On June 20th, Nurse Campbell left the Hospital on completion of her three years' training, to take up her duties on the Private Nursing Staff, and Probationer Hutchinson was appointed to succeed her as Head Nurse in Charity Ward.

On June 22nd, Nurse Lüders left the Hospital on completion of her three years' training, and Probationer Gidney was appointed to succeed her as Head Nurse in Lazarus Ward.

On June 23rd, Probationer Mitford was appointed to succeed Nurse Jolley as Head Nurse in Bright Ward.

Novelties.

Miol.

This is an emulsion of olive oil with malto dextrose, combined with free iodine and phosphorus, and appears to possess undoubted advantages over the ordinary malt extract and cod liver oil emulsions. It has a pleasant, syrupy taste, and is entirely free from any objectionable odour or flavour. It is, therefore, readily taken by children. We have seen some striking results following its exhibition in cases of wasting and early phthisis, in several instances accompanied with hæmoptysis. In all these Miol treatment led to gradual but persistent improvement, the patients gaining weight and strength. Samples and literature may be obtained on application to the Miol Manufacturing Company, c/o Messrs. Manners & Hopkinson, Southwark Bridge Road, S.E.

BOOKS, &C., RECEIVED.—Report of Army Medical Department for 1904; Treatment; Brooklyn Medical Journal; Middlesex Hospital Journal; Transvaal Medical Journal; St. Thomas's Hospital Gazette; St. Bartholomew's Hospital Reports.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-fifth List of Collections.

(Received up to Thursday, June 28th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections

Name.	Shillings.
Amount previously acknowledged ...	71,954½
Beckwith, F. H. (130½s.)—Anon.	5
Bright, Sister (947s.)—J. Carroll	9
Burgess, Dr. J. G. (6s.)—J. Humberstone 1, W. Webber 1, W. H. Clayton 1	3
Carr-Hill, Miss (30s.)—Anon.	2
Douse, A. F.—Collection	10
Earp, Miss E. A.—Mrs. G. L. Shand 10, Miss Edith M. Stribling 31, Mrs. Garton 21, A. J. Fells 20, Miss Fricker 5, Mr. Lindsay 5, Mrs. F. Earp, 26, Lady Channell 5, Collection 17 ...	140
Edsall, R. C. V. (20s.)—Thomas Chequer	5
Guy's Hospital Musical Society — Proceeds of Concert	252½
Hamilton, G. (20s.)—Miss R. E. Hamilton 60, Mrs. Barker 5, E M. C. 3	68
Harper, R. Sydney (34s.)—Miss Raymond 1, Mrs. Charlton 1	2
Hickman, Dr. H. V. (166s.)—V. Westcott ...	7
Hughes, Miss F. G. (6s.)—Collection	30
Ida, Sister—Miss Sophie Pizzey	20
Jackson, Miss Frances (17s.)—Miss H. Nelson's Collection	10
Jolly, Miss (42s.)—Mrs. Birkbeck 20, Collection 20	40
Malcolmson, Dr. G.—Collection	10
Metcalfe, B. B. (60s.)	10
Naaman, Sister (88s.)—J. Bradford's Collection 20, H. Hennequin's Collection 10, E. W. Spratt's Collection 10, T. W. White's Further Collection 14	54
Procter, Nurse (20s.)—G. Webber	2½
Turner, T. (82s.)—L. F.	10½
Wells, Mrs. C. H. (715s.)—J. A. W.	25
Wornum, Mrs. (5s.)	6
	72,676
Further collections from sources outside the Hospital	270½
TOTAL (up to 28th inst.)	72,946½

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

In Aid of the Hospital.

DEAR SIR,—May I call the attention of your readers to the fact that a Garden Fête and Fair, in aid of the funds of Guy's Hospital, will be held in the grounds of The Cedars, Belmont Hill, Lee (by kind permission of Mrs. Penn), or in case of bad weather at the Central Hall, Blackheath, on Thursday, July 12th, at 2.30. Gates opened at 2 o'clock. Fête will be opened by Mrs. H. Cosmo O. Bonsor.

We trust to see a good many Guy's men and their friends. Admission, 2 to 4, 2s. 6d.; Family Ticket for five, 10s. 6d.; 4 to 10, 1s.—I am, dear sir, yours truly,

LOTTIE ARBUTHNOT LANE.

21, Cavendish Square, W.
22nd June, 1906.

The Debating Society.

DEAR SIR,—We observe that you have thought fit to publish a couple of letters concerning the Debating Society, and written over two absurd *noms-de-plume*.

We need hardly state that the Private Business of the Society can only be discussed by us at a General Meeting; and, as the Secretaries who called the meeting, we should certainly not undertake to enter into a controversy with anonymous correspondents in the columns of your esteemed periodical.—Yours faithfully,

G. F. STEBBING.
K. H. DIGBY.

Coccygeal Gymnastics.

SIR,—Last January I saw in a much-read medical journal many letters headed "Superciliary Gymnastics."

They interested me greatly, because, though I cannot cock my ears, I have at last managed to develop another animal characteristic. I sent the result of my experiments to the journal in question, and, although my communication was acknowledged, to my surprise, it has never appeared in print.

As a student I was taught that the human ear was not usually voluntarily movable, but that some persons could naturally contract, and others had acquired the power of contracting, the external muscles. I was anxious to test the latter assertion, but did not wish to attract the attention of the clerks in my office by persistently making faces. I remember, however, that there are muscles over which we have no longer voluntary power-muscles, moreover, the actions of which are not so exposed to observation as those of the ear.

It occurred to me I might put the assertion to the test by attempting to acquire the power of raising or lowering the coccyx, to deflect it to the right or left—in fact, to wag my tail.

After concentrating my mind on my coccyx for months, I was at last able to move that rudiment as easily as a fox terrier.

The attainment, however, is not without its disadvantages. A dog wags its tail when pleased, and this wagging is to a great extent a reflex act. It appears that while obtaining voluntary power over the coccygeal muscles, I have at the same time, most unfortunately, strengthened the reflex nervous centres which determine the involuntary movements of the caudal muscles. Consequently, whenever I see or smell my dinner, especially if the dinner consist of game, such as hare, my coccyx wags most violently. The movement is not noticed by others, but the increased action has produced hypertrophy, so that the lateral movements, always the most energetic, rub the tip on the seat of my trousers, causing discomfort and even soreness, so much so that I am seriously thinking of asking a friend to "tail" me.

I think that this instance of the reacquirement of lost muscular power is quite, if not more interesting than a similar feat with regard to the ears.

I trust that should others be similarly endowed, either naturally or, as in my case, as the result of training, they will hasten to inform us. Advice as to the advisability of "tailing" would be most acceptable to—Your very obedient servant,

GEORGE TURNER.

Office of the Medical Officer of Health,
Government Buildings,
Pretoria, Transvaal.

On the District.

THE Twenty-first Annual Report of the Guy's Hospital Trained Nurses' Institution, published some weeks ago, deserved more extended consideration than we have hitherto been able to give it.

To begin with the dry details of the amount of work done during the past twelve months, would be at the same time to give those who are not familiar with the services of the Institution an idea of its scope of usefulness. The year, we are told, began and ended with a staff of 106 nurses, 24 new members joining and a like number of old members leaving the Institution. During the year, 1,171 applications for nurses were received, and the cases nursed fell into the following categories:—Medical 560, Surgical 255, Infections 64, Mental 29, Maternity 75, Massage 13, and calls at 21 Hospitals and Nursing Districts. These figures, compared with those of the preceding year, show an increase in the medical cases, but a slight decrease in the number of surgical and infectious cases attended. One-half of the applications came from London, the remainder from all parts of the United Kingdom, and even from parts so remote as Paris, Jersey and Oporto.

Fifty-three nurses shared in the bonus of £2,094, which was apportioned at the rate of £6 per share, and invested in the National Pension Fund for their future

maintenance. As an illustration of the substantial benefit of this fund it may be mentioned that one nurse, on reaching the age limit, was due to leave with a pension of £52 per annum.

In connection with the Hospital Maternity Charity the Institution provided one nurse and 31 pupils in midwifery. All these pupils, mostly qualified nurses, passed their examinations and obtained diplomas from the London Obstetrical Society or from the Central Midwives' Board. In the course of the year they attended 1,307 maternity cases, and paid nearly 14,000 visits to their patients. It is in this department report that one comes across the most interesting reading regarding the want and destitution peculiar to the district of the Lying-In Charity, and the extracts from the nurses' day and note books given in the report are instructive, though sorrowful, reading. We have space for only a couple of extracts from a large number which are equally interesting:—

> "Mrs. E. Husband had earned 4d. during the week the baby was born, and they had bought a pennyworth of coal, otherwise there was no fire; no blanket and no appearance of food in the house, a very wretched place. There were several children and a very delicate baby. The mother was starved-looking, and half-clothed."
>
> "Mrs. F. First baby. Husband out of work ever since marriage. Was a plumber's labourer. Was now trying to get a living by hawking coke. A heap of coke occupied half their one room, on which the nurse sat to wash the baby, and the cardboard boxes that the wife had been making for a terribly small payment nearly filled the other half. They were in want of the barest necessaries."

That is a part of District Nursing work of which the outsider has but a vague conception. The Extern can speak of it with some measure of experience, but the average student knows little of the extent of poverty and destitution amongst the patients he sees. One can hazard a guess at it often, but the real insight into the matter only comes through personal experience of the destitution and privations seen on the district. How useful and necessary the Maternity Samaritan Fund has been is therefore obvious. Within the limits of its slender resources—and they are slender enough, unfortunately—it has continued to relieve the more extreme cases of distress. It has been very sadly supported, for during the year the contributions towards it in cash only amounted to the insignificant sum of £88, showing a decrease of some £10 as compared with the amount received during the preceding year. It is highly satisfactory, however, to record an increase in the number of subscribers, and the assistance of kind friends who enabled the Fund to distribute, on Christmas Eve, presents of beef, groceries, a few puddings, clothes, toys and sweets, to almost seventy most deserving recipients. In conclusion, it is as well to reiterate the fact that the Fund can utilise to advantage, at all times, old linen, clothes, calico, old boots and shoes, pieces of carpet, old door mats and screens—in fact, material in any shape or form—and contributions in kind or in money will always be gratefully received and acknowledged by Miss Oxford, the Lady Superintendent of the Institution, at 14, St. Thomas's Street, London Bridge, S.E.

Appointments.

Civil.

FORSYTH, DAVID, M.D. Lond., has been appointed Assistant Physician to the Charing Cross Hospital.

LEWIS, A. C., L.R.C.P. Lond., M.R.C.S., has been appointed District and Workhouse Medical Officer of the Rochford Union.

Military.

Lieutenant-Colonel P. A. WEIR, M.B., I.M.S., has been promoted Colonel from October 26th, 1905. He entered the service in 1875, and served in the Afghan War of 1879–80, receiving the medal for the campaign.

Papers by Guy's Men.

An Address on Dyspepsia. Delivered before the Cleveland Branch of the British Medical Association by Alfred G. Barrs, M.D. Edin., F.R.C.P. Lond.—*The Lancet*, 9th June, 1906.

Pneumococcic Peritonitis in Children: A Study. By W. F. Annand, M.D. Lond., and W. H. Bowen, M.S. Lond., F.R.C.S. Eng.—*Ibid.*

Case of Acute Yellow Atrophy of the Liver. By Captain H. C. Keates, M.B., B.S. Lond., Indian Medical Service.—*Ibid.*

The Evolution of the Medical Jurist. By Herbert Manley, M.D., Barrister-at-Law.—*Birmingham Medical Review* for May, 1906.

A Case of Puerperal Septicæmia due to the Diplococcus Pneumoniæ. By G. Bellingham Smith, M.B. Lond., F.R.C.S. Eng., and N. Ivens Spriggs, M.D. Lond., F.R.C.S. Eng.—*British Medical Journal*, 2nd June, 1906.

Severe Punctured Wound of Lower Jaw. By E. G. Wales, M.A., M.B. (Illustrated).—*Ibid.*

A Lecture on the Uses of Pessaries. By Peter Horrocks, M.D. Lond., F.R.C.P.—*The Lancet*, 23rd June, 1906.

A Case of Complete Removal of a Multilocular Cystic Tumour of the Pancreas; Colo-colic Anastomosis Sixteen days later: Recovery. By John D. Malcolm, M.B., F.R.C.S. Edin.—*Ibid.*, 16th June, 1906.

Two Cases of Intestinal Obstruction. By W. G. Rogerson, M.D., M.S. Lond.—*The Transvaal Medical Journal* for May, 1906.

The Position of Radiation in Treatment. By Gerald Sichel, F.R.C.S.—*The Hospital*, June, 1906.

Oedema Capitis.

THIS is a disease which, so far as my limited reading goes, is not mentioned in any text-book. There are various phases of it. It is generally contracted immediately on entry as a medical student within the Hospital gates. The chief characteristics are a gradual rise attended by acute exacerbations to a maximum terminating, in some cases, by a sudden crisis, but more often by lysis. The disease is extremely infectious, especially when any members of the powers that be (that their reign is only for a span they ought always to bear in mind) happen to be suffering from it.

The first symptoms occur when temporarily out of sight of the parental eye, the patient assuming the pipe of manhood; then, when a little knowledge has made him mad, he looks with a sneer of disdain upon his comrades, and sets up as an authority on psychical and physiological problems that we, who are in our sere and yellow leaf, know were regarded as old and exploded notions when we were in the same stage of the complaint, but which now, from the want of something original in the psychological mind, have to be re-dished up in new garb.

The next stage is when our patient advances into the wards and is systematically taught by the junior powers that come into immediate contact with him that all opinions but their own are of no value whatever, that the experience of years in diagnosing and treating disease goes for nothing, and that general practitioners (not being on the way to starvation for a few years as junior consultants) are all fools, and if they do send up a diagnosis or report of a case, that it is bound to be wrong, and should be consistently ignored.

Then comes a very acute exacerbation, and our patient, having finished his hospital appointments, gets a junior staff appointment. He then erupts, the rash taking the general form of a silk hat and frock coat, many of which are only seen in the fading stage and are rather difficult to identify as to which century they may belong. Now comes the period of infallibility, of dogmatism, of intolerance, of uncharitability with their colleagues and with the general practitioner, who in so very many cases is infinitely better qualified to treat disease than they are; but these are the budding specialists, whose world is bounded on the north by St. Thomas' Street, and on its other three sides by Newcomen Street, High Street, and Maze Pond. After this there comes a period of anxiety to those who are watching the progress of the case, as now may occur a change in the character of the disease, the patient either passing into a chronic state of the disorder, gradually improving, or suddenly being brought to a sense of the error of his ways.

Convalescence begins by the patient realising the necessity of courtesy to those who are working with him, who are after all his fellow-students in the great problems of human life, and to the suffering humanity whom it is his great privilege to relieve; by realising that the imperfect diagnoses of general practitioners are often made under the greatest difficulties, and in most cases are unaided ones and not the combined efforts of clerks, dressers, residents, registrars, medical, surgical, or obstetrical colleagues, and last, but not least, the pathologist, and that in many cases in scorning the diagnosis of the general practitioner, he may be scorning the diagnosis of the very man who first taught him to think in his embryonic days; that after all the general practitioner is the consultant's best friend, and that if it were not for general practitioners there would be no consultants at all.

He also begins to take a personal interest in those around him with whom he has to work, and to appreciate the fact that there is another world besides that contained in a couple of acres or so of Borough and its contents, even if that is a self-providing concern, barring the farm produce, and to discover that no one is infallible, and that "he who never made a mistake, never made anything at all." The treatment of these conditions must be radical; temporary isolation being most effectual but rather drastic, and milder measures generally sufficing.

The sufferers should be taught that money-grubbing is not the sole aim of life; that they are members of a great medical school whose motto is "Dare quam accipere," and that if they proceed to responsible appointments on that medical school's staff they must be prepared to sink their own personal welfare for the good of others, and follow the great example that has been set by so many of our renowned medical forebears, and which is worthily followed by some of our present staff; that though it is a bore to be punctual in attendance at their appointed times, that by inattention to this point they inconvenience others whose time is just as valuable to themselves personally, if not pecuniarily; that though it is a bore to teach, if it is not done then there are only two interpretations of its omission, one that the person supposed to do so will not take the trouble to teach, the other that he is not competent to hold his post; and that the men with whom they have to associate expect to be treated courteously and as gentlemen, and that, above all, in their dealings with outside practitioners, they should always remember that their knowledge, even if vast of their own particular subject, is really very limited as regards that of the complex organism, man, and is merely a tithe of that conglomeration of knowledge which the true doctor, the general practitioner, is supposed to have.

And, lastly, there is the treatment of those who do not attain to high dignity; some may get so far as holding resident appointments, some may not.

Let this fact be borne in mind, that the value of resident appointments is a diminishing one year by year; that though it be great even yet, in the old days, with many more students and far fewer appointments open to them, the appointments were an infinitely more valuable prize than at the present time. Let the fact be impressed upon the sufferers that their complaint will be the worst possible advertisement for them in their

future life; that some of the most brilliant men in a hospital year are compelled to leave their studies from very varying circumstances, such as ill-health, want of capital, and the like, and that they will come into contact with these men in their life as the despised general practitioner, men who have not stood still since they left their hospital, but have gone on, ever onward, in the grand study of human nature, and whose general opinion on many cases of illness seen for the first time will be found to be as helpful and as satisfactory as the opinion of most consultants.

A GENERAL PRACTITIONER.

Reviews.

The price of books submitted for review should in every case be stated.

The Bacteriology of Peritonitis. By L. S. Dudgeon, M.R.C.P., and P. W. Sargent, M.A., M.B., B.C. (Cantab.), F.R.C.P. Pp. 243, illustrations 10. (Archibald Constable & Co.) Price 7s. 6d. net.

This work is the outcome of the examination of the peritoneum in two hundred and seventy cases operated on in St. Thomas's Hospital for more or less acute conditions. The aims of the authors were (i.) to place the bacteriology of acute peritonitis on a secure foundation, and (ii.) to obtain facts which would prove of use in prognosis and treatment. The technique employed in the investigations is exceptionally good, and the results have a correspondingly enhanced value. They prove beyond all doubt the important rôle which the various strains of the bacillus coli play in the majority of acute abdominal conditions.

Not less interesting is the frequent appearance of the staphylococcus albus, either by itself or in conjunction with some other micro-organism. This, as a rule, non-virulent organism was almost constantly present in all cases of intraperitoneal hæmorrhage, and goes far, in the opinion of the authors, to explain the so-called "chemical peritonitis." It also explains the temperatures which in the past have been put down to the absorption of a very hypothetical toxin produced by coagulation of the blood. The prognosis when this organism alone is present is invariably good. The authors find this organism also in a large number of cases where there is a mixed infection, and it is apparently the first organism to appear in most cases of acute peritonitis, the virulence of which is due to some other organism, such as bacillus coli. The prognosis in such cases of mixed infection is more favourable according as staphylococcus albus is present in quantity compared with the second organism. The explanation offered being: staphylococcus albus produces marked phagocytosis, and being itself non-virulent, is by itself almost harmless, but the phagocytes in numbers are ready to deal promptly with any secondary invader.

With regard to treatment, the authors show that clinical experience and bacteriology point in the same direction. In streptococcic infection the phagocytes *per se* are powerless, and the outlook practically hopeless. This calls for polyvalent antiserum and thorough and complete lavage at the time of the operation.

In cases of mixed infection with staphylococcus albus and other organism, lavage is to be replaced by dry sponging, as irrigation of the peritoneum washes away phagocytes and may spread the virulent organism and so produce universal peritonitis. The figures given are most striking. General peritonitis treated by thorough lavage with saline solution gives a mortality of 80 per cent. Treatment of similar cases by local dry sponging only 45 per cent.

The book is admirably got up, the illustrations are good, and it is throughout well written. Another volume on the rôle of the phagocytes is promised us, and from the few words on this important point with which the authors favour us should prove equally interesting.

We strongly recommend the book to our readers.

The Metabolism of the Carbohydrates. By F. W. Pavy, M.D., LL.D., F.R.S. (J. & A. Churchill.) Pp. 138. Price 6s.

In this book the author once more puts forward his views with regard to carbohydrate metabolism. The subject-matter is almost the same as in his book, "The Physiology of the Carbohydrates." Dr. Pavy's views on the subject are well known, but we feel they will not be accepted without more conclusive evidence than is set before us. Throughout the volume he takes every opportunity of attacking the glycogenic doctrine of Bernard. It would seem, however, that the author accepts the principal points of the theory, with only slight modification. Speaking of the fate of glycogen, he remarks that it is used up during exercise in the muscles; that it is probably transported from the liver to the muscles, and the following sentence is significant:—"I should think that the first alteration that occurs is the breakdown of its molecule" (glycogen) "into molecules of glycose, and that these are instantly taken on by the proteids of the blood." From this the sugar is given up to the tissues. Comparison is drawn between hæmoglobin and oxygen.

To use his own argument, if a little takes this path, why not all? But this is regarded merely as the means of disposal of the surplus; most of the sugar is built up into proteid and fat in the intestine, and never reaches the blood as carbohydrate. The position appears to us untenable.

The last few pages are devoted to the treatment of diabetes, and the views of a man so experienced in such matters should prove extremely valuable.

Manual of Medicine. By F. Monro. 2nd Edition. University Series. (Ballière, Tindall & Cox.) 15s. net.

This is a small book consisting of 1,000 pages in octavo; the print is large and it contains 42 diagrams, many of them occupying a whole page. Within this narrow

compass an attempt is made to confine the facts and theories of medicine, including diseases of the skin.

The book is therefore necessarily sketchy in many places, treatment especially seems often vague. Beginners will get little help from phrases like the following, "Treatment therefore will be directed to the stomach, nervous system, or other organs as the case may require, and to the correction of wrong modes of living, eating, an drinking." The pernicious habit of generalising is acquired easily enough without any help in that direction from text-books.

Further, in reading a book of this kind one is apt to get an erroneous idea of the relative importance of diseases; for example, Bothriocephalus latus and Thomsen's disease have a page devoted to each of them, while the important phenomenon of Bradycardia is dismissed in six lines, and the treatment of it in one-and-a-half lines.

It would be presumptuous to say there are mistakes in this volume; the whole book is a mistake, except in so far as it meets a want that ought not to exist, the want of a student who desires to learn a little in a very little time.

In short, it is a very admirable cram book, concise, condensed, correct, and complete.

Aids to Surgical Diagnosis. By H. W. Carson, F.R.C.S. (Baillière, Tindall & Cox, Covent Garden.) Price, 3s. 6d.

This, the latest addition to the "Students' Aid Series," is a small volume of 140 pages, giving the bare outlines, in tabloid form, of symptoms and signs in the various surgical disorders. It possesses the faults and excellences of the other volumes of the series—faults owing to its necessary incompleteness, good points in its systematic arrangement, its useful index, the absence of repetition, and the mass of detail that is crammed into the limited amount of space at the author's command. Desiccated diagnosis, served up in this manner, is useful enough for those who wish to review the whole range of their subject before an examination, or for juniors who wish to obtain a bird's eye view before starting with the larger text-books. To such, this little book will be obviously useful, as it is reliable, and its summaries (particularly the chapter on deformities) are excellently made.

Heath's Manual of Minor Surgery and Bandaging. Thirteenth edition. Revised by Bilton Pollard. (J. & A. Churchill.) Pp. 409 and xiv. 6s. net.

Probably few men have become qualified during the past ten years without having read parts of "Heath" at one period or other of their career, and the fact that it has run through twelve editions before the present one is an eloquent testimony to its popularity. As a manual for dressers to read it is unrivalled and full of practical advice, much of which, however, is conveyed in terms which appear quaint to men educated at Guy's, where such trust is placed in the skill of the dressers. We read, for instance, that "Washing out the bladder is an operation generally entrusted to the house-surgeon."

The present edition has been very thoroughly revised and brought up to date—descriptions being given of a segregator and of the use of storaine as a spinal analgesic. Short descriptions of Crofts and Bavarians are given, but it is strange that the string method of removing a ring from a swollen finger finds no place among the many excellent Front Surgery tips that are given. We consider it a mistake that the use of chloroform during the removal of adenoids should be advised, as recent statistics have proved its great danger during this operation. The picture of a Hodgen is still ridiculous and impossible, and the extension is wrongly applied in the picture illustrating the treatment of hip disease—but these are isolated mistakes in an excellent book.

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

Directions to be followed in sending *Diphtheritic Membrane*:—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

Diphtheria specimens are to be labelled *Immediate*.

Postal Orders to be made payable to Mr. C. H. WELLS

NOTICES.

C. D. P.–S., HUDDERSFIELD.—There is no evidence of tubercle in these fragments, and we think their structure is much more in favour of syphilis. There is chronic periostitis with marked thickening and increased nucleation of the walls of the vessels. Within the cancellous spaces the medulla is more fibrous than normal, and the osseous tissue is becoming sclerosed.

C. D. P.–S., HUDDERSFIELD.—This specimen is thickly infiltrated with a soft carcinomatous growth, such as might originate in the antral cavity and protrude into the nasal fossa. Much of the growth is caseous on the surface.

C. S., NORWOOD.—Tubercle bacilli are not found in this specimen, which is purulent in character.

PATHOLOGIST.

Sport.

Cricket.

GUY'S v. GRAVESEND.

Played at Gravesend on Saturday, June 16th. Graves- won the toss and went in to bat on an excellent wicket, but so well did Chase and Kahlenburg bowl, backed up by really excellent fielding, that the whole side were dismissed before lunch for 104. Several very good catches were made, and two men were run out by smart fielding by Covell at mid-off. Kahlenburg took three wickets for 32, and Chase four for 51. On the Hospital going in to bat, Chase and Tolhurst made an excellent start, and later, Gibbons, Smith and Pedrick batted well for their runs, the total being 214 for six wickets, when Tolhurst declared.

Again Gravesend were dismissed for a small score, this time Archer and Jamieson securing the wickets, the former taking three for 65, and the latter five for 38; Archer bowled his slow leg-breaks really well, and had hard luck in not having Capt. Veal stumped off him before the latter had scored. Subsequently the batsman punished him severely, once driving him out of the ground. Score :—

GRAVESEND.

	1st Innings.		2nd Innings.
Capt. Veal, c Covell, b Kahlenburg	8	not out	50
J. Russell, c Smith, b Chase	15	c Smith, b Jamieson	2
L. H. W. Troughton, c & b Chase	5	c Smith, b Tolhurst	13
Capt. Prothero, c Archer, b Chase	25	c Pedrick, b Jamieson	10
Dr. Brydon, absent	0	c & b Jamieson	15
F. W. Bowman, c Kahlenburg, b Chase	10	retired hurt	7
H. Gramshaw, not out	29	c Munden, b Archer	8
B. Tabrum, run out	4	b Archer	3
K. Wood, c Pedrick, b Kahlenburg	1	c Archer, b Jamieson	5
L. C. Troughton, c Chase, b Kahlenburg	0	c Jamieson, b Archer	1
Ashdown, run out	1	b Jamieson	4
Extras	6		7
Total	104		125

GUY'S.

R. G. Chase, c L. H. Troughton, b Bowman	40
A. M. Tolhurst, c L. H. Troughton, b Prothero	27
H. V. Gibbons, b Ashdown	29
M. M. Munden, c Veal, b Prothero	8
P. Smith, not out	55
H. Archer, c L. H. Troughton, b Prothero	2
P. Pedrick, b Veal	29
G. C. Covell, not out	8
Extras	16
Total	*214

* Innings declared closed.

A. H. Pickett, S. W. Jamieson and F. Kahlenburg did not bat.

GUY'S v. LONDON COUNTY.

It was very unfortunate that the Hospital could not put out their strongest side for this match, seeing that London County are the only team that have beaten them this year. Nevertheless, it was an excellent game, and when London County lost their seventh wicket for 120, it looked as if the Hospital might win, but it was not to be. Barnett, Riches, Chase and Tolhurst were all unable to play.

The Hospital went in to bat first on a plumb wicket, but lost three wickets quickly, all to the lob bowler. Then Archer and Covell made a good stand, adding 80 runs before Covell was caught at mid-off. He had batted very well, and looks as if he is at last going to show his true form. After his dismissal, though, a collapse ensued, and the whole side were out for 143. Archer was last out to a fine catch in the country, after batting well and pluckily for 55.

London County made a bad start. Grace, after being missed in the slips off Kahlenburg, being bowled by Archer with a very good ball. With Marshall out seventh wicket, it looked anybody's game, but Murch and Walmesley knocked off the runs, and afterwards De Roche hit hard for 46.

The fielding again was quite good, and Kahlenburg and Archer bowled very well, though the latter wants more confidence. Score :—

GUY'S.

H. V. Gibbons, c & b C. B. Grace	8
P. Smith, b C. B. Grace	16
M. M. Munden, c Penfold, b C. B. Grace	2
G. C. Covell, c L. Covell, b Marshall	42
H. Archer, c sub., b Marshall	55
F. Willan, c & b Marshall	5
W. T. Clarke, b C. B. Grace	0
S. W. Jamieson, st Jewell, b C. B. Grace	0
G. N. Bartleet, c Penfold, b Marshall	1
F. Kahlenburg, st Jewell, b C. B. Grace	3
W. Doll, not out	1
Extras	10
Total	143

LONDON COUNTY.

W. G. Grace, b Archer	6
L. Lulham, c Covell, b Kahlenburg	17
A. N. Jewell, c Clarke, b Jamieson	7
C. B. Grace, b Kahlenburg	12
L. Clarke, c Doll, b Kahlenburg	10
A. Marshall, c Bartleet, b Kahlenburg	32
Murch, c Bartleet, b Kahlenburg	36
L. Covell, c Covell, b Archer	0
S. E. Walmesley, c Bartleet, b Kahlenburg	15
De Roche, not out	46
Penfold, st Doll, b Archer	25
Extras	24
Total	230

PRESENT v. PAST.

Played at Honor Oak on Saturday, 23rd. The Present gave a very poor display in all departments of the game, and were badly beaten. Wyatt, Scott and Tuck batted very well for the past, Wyatt in particular hitting splendidly all round the wicket. Both Smith and Munden played balls into their wickets in the second over, and the Present never recovered from this bad start, Tolhurst alone offering any resistance. He was unfortunately run out after batting very well for 46. Score :—

PAST.

J. S. Bookless, lbw, b Archer	1
H. Simms, b Jamieson	11
F. Morres, c Chase, b Archer	4
H. D. Wyatt, c Gibbons, b Smith	95
H. M. Langdale, b Jamieson	25
W. Scott, c Tolhurst, b Chase	50
E. S. Tuck, not out	72
E. Morgan, not out	14
Extras	21
Total	*293

* Innings declared closed.

G. N. Bartleet, R. Bryden, C. H. Fagge and R. Willan did not bat.

PRESENT.

R. G. Chase, b Morgan	1
P. Smith, b Bartleet	1
M. M. Munden, b Bartleet	0
H. V. Gibbons, c Morres, b Bartleet	4
A. M. Tolhurst, run out	46
H. Archer, c Fagge, b Morgan	7
G. C. Covell, b Bartleet	2
W. T. Clarke, c Bartleet, b Morgan	6
A. H. Pickett, c Langdale, b Bartleet	15
S. W. Jamieson, lbw, b Bartleet	9
W. Ingram, not out	8
F. Kahlenburg, b Bartleet	3
Extras	7
Total	109

Guy's Hospital Rifle Association.

The third shoot for the Armitage Cup took place at Runemede on Thursday, 21st inst. Unfortunately, both French and Cooper were too busy to get down. The weather was ideal for shooting, and we made a much better score, Ticehurst putting up a good 95.

Scores below :—

C. B. Ticehurst	95
H. J. Henderson	88
C. A. Blake	86
C. C. Freer	84
D. Reynolds	75
R. M. Roberts	61
Total	489

In connection with the Armitage shoot handicap a sweepstake was held, seven men entering. Ticehurst was scratch, Blake, Henderson and Freer received one-third points dropped from 100, and Reynolds, Roberts and Reeve received two-thirds of the points dropped from 100.

1. Ticehurst	(scratch)	95	1st prize, 5/-
2. Henderson	+4	92	2nd Prize 2/-
3. Reynolds	+16	91	
4. Blake	+4	90	
5. Freer	+5	89	
6. Roberts	+26	87	
7. Reeve	+26	86	

Births.

CARRELL.—On June 15th, at the Drive, Ilford, the wife of G. N. P. Carrell, L.R.C.P. Lond., M.R.C.S., of a son.

STEWARD.—On the 26th June, at 125, Harley Street, W., the wife of F. J. Steward, of a son.

WETHERELL.—On June 17th, at the Old House, Ipswich, the wife of Frank Cordeux Wetherell, M.B. Lond., of a daughter.

Marriages.

BOX—ROBERTS.—On June 6th, at Kirk Braddon, Isle of Man, by the Rev. Canon Moore, assisted by the Rev. J. Grassett Pope, William Frederick Box, M.B. Lond., to Constance Marion, second daughter of W. O. Roberts, Esq., of Pulrose House, near Douglas, Isle of Man.

BURTON-BROWN—BROWN—On June 16th, at Holy Trinity Church, Northwood, by the Rev. E. B. Backhouse, assisted by the Rev. Cecil Ayerst, Gerald Burton-Brown, M.D., youngest son of T. E. Burton-Brown, M.D., C.I.E., to Beatrice Rowland, fourth daughter of the late Charles Rowland Brown, of Northwood.

ROBERTSON—MAXWELL-HIBBERD.—On June 20th, at Auckland, New Zealand, Carrick Hey Robertson, M.B., B.S. Lond., F.R.C.S. Eng., eldest son of R. Blair Robertson, Athole Lodge, Forest Hill, London, to Constance, youngest daughter of Charles Maxwell-Hibberd, of Pietermaritzburg, Postmaster-General of Natal. By cable.

TRAIL—GREEN.—On June 16th, at S. Clement's, Bournemouth, by the Rev. P. Green, Rector of Saltford, and the Rev. N. Glanville, David Herbert Trail, M.B., third son of Colonel Trail, R.E., to Ada, youngest daughter of the Rev. E. P. Green, of Boscombe, Hants.

Death.

RINGER.—On June 12th, at Lansdown Terrace, Cheltenham, Deputy Surgeon-General Theobald Ringer, I.M.S., late 7th Bengal Cavalry.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

PRIZE DAY has come and gone. The Colonnade has given up its wide tabernacle, and the Park most of its notice boards, and to the majority Prize Day is only a memory of an interesting and entirely successful event. It was favoured with the best weather, and the terrace, with its white pillars, gave a touch of more than ordinary picturesqueness to the scene in the Park which old Prize Days lacked. The speeches possessed that interest and excellence which one expected from the speakers, and each of them held a thought or an expression which lingers, and deserves to linger, in one's mind. The wards, as usual, were at their best, and the interest displayed by the visitors, together with the laudatory comments on the state of our hospital which one heard freely expressed, would have pleased even Thomas Guy had he been there. On such occasions as these it is permitted us to unbend, to become genially human again, almost to the extent observable at Christmas time—even to protest fervently that we are thankful that there are such days in the calendar. The stranger within our gates sees us in part motley, with leave, for an afternoon at least, officially to speak our mind and declare to the world at large that we hold a high heritage, and have a claim on public generosity.

THIS time Sir Wm. Cameron Gull spoke our mind for us, and few could have spoken it better. Every Guy's man, every thoughtful man in fact, will, for instance, be in hearty accord with him as to the duty which the public owes its hospitals, and the want of interest it displays in these institutions. The exact cause of this want of interest it would be difficult to state. It is much too sweeping an assertion to say that people who are charitable enough to appreciate the claims of such foundations as ours, possess so little sense of humour that they can take the anti-vivisectionists' vagarious declamations against medical schools in the serious, sorrowful fashion of Mr. Arnold Lupton. The question how far such caricatures as those which appear in prominent positions in the majority of London railway stations are responsible for the want of cordial support, of which most medical schools complain, is too large a matter for discussion here. The occasional "scandal," whether true or manufactured, may mean the loss of some support, but the indifference of the general public is an indifference due to ignorance much more than to active venomous opposition to our medical school as a hotbed of vivisection. The man in the street has not yet learned to appreciate the fact that the object of a general hospital is as much the study of disease as its cure, or that when he enters such an institution as a free patient he owes a debt to his fellow-men as much as he has a claim on their charity. When a learned judge expresses his astonishment that a doctor should have any "moral responsibility" towards his patients, it is scarcely

surprising that a mere layman should regard his duty to the hospitals adequately performed when he contributes an occasional odd shilling towards their funds. Not only we as Guy's men, but the profession as a whole, owe a debt to men like Sir Wm. Cameron Gull for their efiorts to educate the public to a full sense of its responsibilities. Unfortunately the mere layman does not, as a rule, read this GAZETTE, and for the most part the daily press ignored our Prize Day speeches. We can only hope that the public may realise its duties as speedily as possible, and wait for the time when our leading hospitals, as such, will be represented in Parliament, and when our leading newspapers will devote as much space and attention to our work and our difficulties as at present they afford Mr. Eustace Miles or the Poplar Board of Guardians.

AN equally successful function, though one of less public interest, was the Biennial Festival Dinner, held the previous evening. It says much for the solidarity of Guy's men that more than two hundred men, all of them in active practice, should have made time to attend such a dinner. To an outsider, the contemplation of such a festival dinner must have been interesting from many points of view. It may be that such functions are in a sense mutual admiration societies, just as our prize days are dignified frivolities, but they serve at least to show that while to a Guy's man loyalty to his hospital is almost a sub-religion, he is yet able to look beyond Guy's. At such gatherings reminiscent conversation must of necessity be the main current, but the side eddies at the Biennial Dinner are as interesting to the stranger, who takes a disinterested and catholic view of the profession, as the main stream is to the junior who listens to revelations about "Teddy," to tales of the old dissecting-room, and the excellent gossip of his table fellows of a past that to some of us seems antiquity itself.

THE speeches at the dinner were more than usually interesting. Mr. Golding-Bird, whose faculty of expressing himself happily was seen to advantage in proposing the toast of the evening, reviewed the progress of the hospital during the past few years, and Mr. Bonsor paid a high tribute to the personal interest of the Staff in the Medical School—a tribute which Sir Wm. Cameron Gull has cordially endorsed. Sir Samuel Wilks looked back with satisfaction to the contributions which Guy's has made towards the advancement of medical science—contributions in which his own work has had a brilliant share. And last, but not least, came, not a speech, but an excellent memento of the dinner in the shape of a well-executed plate, representing the founders and makers of Guy's Hospital—Thomas Guy, William Hunt, Saunderson, Cooper, Rees, Gull, Hilton, Cock, Addison and Bright—and the Secretary's promise that the Committee would attempt to continue the series and present to those attending the next dinner another portrait plate of equal interest and equal usefulness.

DR. CRAIG'S invitation to students to visit Earlswood has hardly had an encouraging response. Only a few names were handed in, and under the circumstances the trip has had to be abandoned for the time being. Thursday was, it is true, an unfortunate day to select for such an outing. It is a full day at the hospital, with most of the Staff going round, and with both medical and surgical outers active at the back. But for all that we venture to think that a party might have been arranged, and it is much to be regretted that so little enthusiasm and interest have been manifested in the proposal. A visit to Earlswood was a sessional event some years ago, and usually a large number of men handed in their names. It is a pity that this, the first attempt to revive what should be an instructive and interesting termination of the summer course in psychological medicine, has been so discouraging. We hope that the attempt has not altogether been given up, but that Dr. Craig will give those interested in the matter—and there must be many such—another opportunity on some less busy day in the week.

IT has been our unpleasant duty in the past to direct attention to the complaints regarding the College catering, and—an even more uncongenial task—to endorse these complaints.

During the last three months there have been marked changes for the better in the catering, and it is, therefore, only just that we should acknowledge the unmistakeable improvement that has been made as readily as we registered a protest against the old régime of cold food and vexatious delay. It is too much, perhaps, to expect all-round satisfaction in such a short time, but enough has been done already to show that the steward is bringing about a radical change for the better. Both at lunch and at dinner this improvement is seen ; the food is well cooked and well served, and the waiting is as prompt as could be expected under the circumstances. It is unnecessary to specify—though in justice to the steward's efforts it is, perhaps, reasonable that we should specify—the items in which this improvement is most apparent, but one thing at least is worthy of separate mention—the luncheon buffet in the dining hall. It is a pleasant duty to draw attention to these changes for the better, and in expressing our appreciation of the steward's endeavours to rectify the mistakes and vexations of the past, we sincerely trust that the question of the College catering will no longer be the subject of complaint at every Clubs' Union meeting, but will be allowed to slide into the list of things forgotten and forgiven—so far at least as this column is concerned.

THE election to fill the vacancies on the Council of the Royal College of Surgeons has proved more than usually interesting to judge by the number of votes recorded. Professor Wright came in an easy first, and as he is an old Guy's man, and one, moreover, who still has the interests of this hospital at heart, we may, in a sense, regard him as an additional representative of Guy's Hospital on the Council, and felicitate both him and ourselves on his election. Mr. Symonds, unfortunately, needed a few more votes to secure the third place. His narrow minority, however, shows that his candidature was a popular one, and is a good augury of success should he decide—as all Guy's men would wish him to decide—to solicit the votes of his colleagues in the profession when the next vacancy occurs.

"YOU could do with a surgeons' parlour," is a remark which one frequently hears from visitors to the surgical wards who have attended operations and thus had an opportunity of seeing under what conditions our surgeons work. That there is a great deal of truth in it few will deny. We have at present no room which is consecrated to the surgical staff, where they can receive their visitors and where they can have some privacy before or after their work. The ante-rooms of the operating theatres can hardly be said to supply that want. They are common to ward clerks, patients and students as well as to the staff, and are certainly not parlours. We have been told that the Treasurer shares a room with the House Committee: the surgeons do not even possess that privilege, but have to be content with what is practically a corner of their theatre. In so conservative an atmosphere as ours is, it would perhaps be too much to expect them to have a place where they could have tea—though we understand that at other metropolitan hospitals the non-inebriating cup is almost as indispensable an adjunct to the proper performance of operations on a summer afternoon as the overall—but it is resonable to hope that they may obtain a common room of some sort. If, in addition, the surgeons' afternoon tea becomes an institution we do not anticipate that any member of the staff will seriously object.

WE owe an apology to the Senior Tennis Team. In our ignorance we asserted that the team has been unfortunate enough to lose its Inter-hospital matches. The report of the team's prowess, which appears in this issue, shows on the contrary that our condolences should have been congratulations. Although we did not succeed in winning the Cup, the team managed to beat both Bart.'s and London, losing to St. Thomas's in the final.

AT the going-off dinner, held a fortnight ago the following Residents retired : Messrs. O'Brien, Williams, Clarke, May and Alcock. Messrs. H. C. Cameron and R. E. French were elected President and Vice-President for the ensuing quarter ; the on-coming Residents being Messrs. G. Hamilton, H. Knight, Reeve, Maybury, Costobadie, and Lowe.

Prize Day.

ONCE again we were favoured with ideal summer weather on Wednesday, July 4th, the occasion of the annual distribution of prizes gained by Guy's men during the preceding twelve months, and consequently the whole happy function, including the garden party and reception, was, from every point of view, a complete success. The famous band of the 1st Life Guards, by kind permission of the Commanding Officer, performed in perfect style a selection of classical music which was highly appreciated. Immediately after the oratory in the Physiological Theatre, the well-kept lawn was thronged with several hundred guests, and the many-hued dresses of the ladies combined to produce, with the professional robes, a picture at once animated and pleasing. The varied refreshments which had been provided could not be said to have been neglected, and the different portions of the College and the Hospital wards were visited by a large proportion of those present.

THE PRIZE DISTRIBUTION.

At the prize distribution the chair was occupied by R. Clayton Cole, Esq., who was supported by Sir W. Cameron Gull, Bart., and most of the members of the Staff of the College.

The CHAIRMAN having opened the proceedings by calling upon the Dean to read his annual report,

Dr. EASON, as Dean, read his report of progress:—

The progress of the School throughout the past year has been very satisfactory. Notwithstanding the generally diminished entry at the Metropolitan Schools of Medicine, the number of students who have joined this School during the past twelve months shows a distinct increase over that of the preceding year. The number of students who have qualified during the past year maintains the high record of previous years. At the University of Oxford, 1 student obtained the degree of Master of Surgery, and 2 graduated as Bachelors of Medicine and Surgery. At the University of Cambridge, 5 men obtained the degree of Doctor of Medicine, 1 the degree of Master of Surgery, and 11 qualified as Bachelors of Medicine and Surgery. At the University of Durham, 3 students obtained the degree of Doctor of Medicine, and 1 that of Master of Surgery. At the University of London, of which Guy's Hospital is now the largest medical school, 5 students obtained the degree of Doctor of Medicine, 2 the Mastership in Surgery, and 26 graduated as Bachelors of Medicine and Surgery. In addition to University qualifications, no fewer than 52 students obtained the diploma of the Royal Colleges of Physicians and Surgeons, and 4 the diploma of Fellow of the College of Surgeons. The entries of Guy's men into the Naval Medical and Indian Medical Services show a slight diminution compared with preceding years. In the Dental School, 30 students obtained the diploma of Licentiate of Dental Surgery granted by the College of Surgeons of England, and the entry for this year shows a distinct increase on that of 1904-5. The School has to congratulate Mr. Thomas Holmes upon obtaining the University Gold Medal at the examination for the Mastership in Surgery at the University of London, Mr. Gerrard the Gold Medal at the M.D. examination, and Mr. Geo. Cockcroft upon obtaining the Gold Medal at the recent examination for the Bachelorship of Medicine and Surgery. Nine other Guy's men obtained Honours in various subjects at the final examination for degrees at the University of London. These results afford gratifying testimony to the high standard of efficiency maintained at this School.

The changes on the Hospital Staff during the last year have been numerous. Mr. Higgens ceased his duties as Senicr Ophthalmic Surgeon in April, after 32 years' service on the Hospital Staff, Mr. W. A. Brailey retired from his post as Ophthalmic Surgeon, under the age limit, in August last, and Messrs. H. L. Eason and A. W. Ormond have been appointed Ophthalmic Surgeons to fill the vacancies thus created.

Mr. Clement Lucas, the Senior Surgeon, has retired from hospital practice during the last year. Mr. L. A. Dunn has been appointed Full Surgeon to fill this vacancy. Mr. R. P. Rowlands has been appointed to fill the vacancy on the Assistant Surgical Staff caused by the promotion of Mr. Dunn.

The Staff has also to regret the untimely death of Dr. J. H. Bryant, Assistant Physician to the Hospital, and Lecturer on Materia Medica to the Medical School, and desires to record its high appreciation of his work and of his great services to the Hospital and School during the long period he was attached to the institution. Dr. H. S. French has been appointed Assistant Physician to fill this vacancy.

On the School Staff there have also been an unusual succession of changes during the last year. The School have to congratulate themselves on having obtained the services of Dr. A. H. Fison as Lecturer on Physics in the place of Professor Reinold, whose recent resignation was announced at this time last year. Dr. Fison is so well known as a successful lecturer and teacher that the School are confident that his accession to the Staff will result in an increased efficiency in the teaching of one of the early scientific subjects whose importance in the curriculum has recently been much increased by the regulations of the Royal Colleges of Physicians and Surgeons. Mr. Blake Odgers, formerly Demonstrator of Anatomy, has been appointed Assistant Surgeon to the General Infirmary, Northampton, and Mr. A. R. Thompson, formerly Resident Surgical Officer, has been appointed Demonstrator in his place. To fill the vacancy caused by the promotion of Mr. R. P. Rowlands to the Surgical Staff, Mr. R. A. Greeves has been appointed Surgical Registrar, and Mr. H. C. C. Mann has been appointed Medical Registrar in place of Dr. H. S. French. Dr. Spriggs, having been appointed Assistant Physician at St. George's Hospital, has recently resigned his post as Demonstrator of Physiology,

and the vacancy has been filled by the appointment of Mr. A. F. Hertz. More recently, Dr. Forsyth, the second Demonstrator of Physiology, has been appointed Assistant Physician to Charing Cross Hospital, and a further vacancy has been made in the department of Physiology. Mr. Mollison, Demonstrator of Anatomy, has been appointed Warden of the College in the place of Mr. Eason, resigned, and Mr. Louisson has been appointed Assistant to the Lecturer on Bacteriology in the place of Dr. Price Jones, who retired during the year.

Finally, Dr. Levy has resigned the post of Anæsthetist to the Hospital, which he has held for the last two years.

As a consequence of the changes in the Ophthalmic Department, new arrangements have been made for the improvement of the teaching and the efficiency in the Out-Patient Department and Wards; two new appointments of Clinical Assistants have been made, and Mr. W. Anderson, late House-Surgeon at the Royal London Ophthalmic Hospital, and Mr. Bergin, late House-Surgeon at the Royal Eye Hospital, Southwark, have been appointed to these posts.

The Advanced Courses of Lectures in Physiology have been continued during the past year, and have been attended by most encouraging audiences. We desire to thank Dr. Haldane, Lecturer on Physiology at the University of Oxford, Dr. Ramsden, Dr. Hopkins, and Dr. Boycott for their kindness in lecturing. Their services have been highly appreciated by the School, and have added greatly to the value of the courses of instruction given.

During the year arrangements have been made for the resumption of complete courses of instruction for the Diploma in Public Health. Formerly portions of this course had been abandoned in the hope that other schools might follow this example, and that, as a consequence, some centralization of the teaching might result. This has not been the case, and as there was still a steady demand for such teaching at the School, the complete courses, for which there is every facility in our laboratories, have been resumed.

More recently, the teaching of Surgery, especially in the Departments of Operative Surgery and Clinical Surgery, has been reorganized, and it is felt that these changes will result in the improvement of the teaching in a subject which has greatly increased in importance during recent years.

In the Dental School, it has been realised during the past year that there is a need among some members of the Dental profession for the opportunity of acquainting themselves with the more recent advances in mechanical dentistry and the allied sciences. To meet these requirements, the School has instituted Post-Graduate Courses in Mechanical Dentistry, under the charge of Mr. Pillin and Mr. Campkin, and Dental Bacteriology under the charge of Dr. Eyre. The first of these courses is now being held, and the response by the Dental profession has been quite up to the expectation of the Dental Staff, and it is thought that a continuance of such classes will become a necessity.

The enlargement of the Dental School and the improvement of the Dental Out-Patient Department is also engaging the earnest attention of the Staff, and it is probable that radical and extensive alterations will be made in the immediate future. Arrangements will also be made for the training of pupils in Mechanical Dentistry, as an alternative to the three years' apprenticeship to a registered practitioner.

The staff of the Dental School is also to be increased by the appointment of an additional Demonstrator of Practical Dentistry and a Demonstrator in Physiology, for revision classes in that subject preparatory to the final examination for the Licentiate of Dental Surgery.

At this time last year the Gordon Museum of Pathology was opened for the use of students, and mention was made of the fact that the demolition of the old block of buildings would add materially to the garden space available for the use of convalescent patients, nurses and students. This work has now been completed, and the improvement resulting therefrom is open to your inspection. The cost of removing the Biological Department from the old Museum and adapting the gallery formerly devoted to Comparative Anatomy to the requirements of Biological teaching has been entirely defrayed by the munificent donation of £600 from an anonymous benefactor. The School has to acknowledge this valuable assistance with the greatest gratitude. In addition to the donation for the Biological Department, the School has also to acknowledge a further valuable bequest for the purposes of endowment of medical education and research. Under the will of the late Mrs. Arthur Durham, widow of a former surgeon to Guy's Hospital, the School has received a bequest of a thousand pounds for the endowment of a travelling scholarship, to be called the Arthur Durham Travelling Scholarship. The School has acknowledged this generosity with the most sincere gratitude, the more so as the late Mrs. Durham had for years shown her interest in the School by the annual gift of a sum of money for dissection prizes, a much-coveted distinction among the students in the dissecting-room. The School can only trust that these generous gifts to the endowment and assistance of medical education will stimulate further gifts to this end, for though much has been done, much more remains to be done. The most pressing need of the School at the present time is a sum for the endowment of a chair of Pathology. The subject, which is the key to all advancement in the science and art of medicine, is growing so much in extent and importance that the School has decided that at the earliest opportunity a department of Pathology must be instituted, with a separate staff of Lecturers and Demonstrators. This important step cannot be taken without further monetary assistance, but it is hoped that such endowment may be forthcoming and a department instituted which will enable the subject to be taught in a manner worthy of such a great School of Medicine as that of Guy's Hospital.

THE CHAIRMAN:—I will now ask Sir W. Cameron Gull to distribute the prizes.

Dr. EASON then called the names of the successful competitors, and the awards were presented as follows:—

OPEN SCHOLARSHIPS IN ARTS.—Herbert Leslie Hopkins, Owen's School, Islington, £100. Alan Herapath Todd, Sherborne School, £50.

OPEN SCHOLARSHIPS IN SCIENCE.—Mare Antoine Emile Duvivier, Guy's Hospital Medical School, £150. Thomas Duncan Macgregor Stout, Guy's Hospital Medical School, and Arthur Neville Cox, Derby School, equal, £30 each.

SCHOLARSHIP FOR UNIVERSITY STUDENTS.—Claude Gordon Douglas, B.A., Magdalen College, Oxford, £50. Harold Chapple, B.A., St. John's College, Cambridge, Certificate.

OPEN SCHOLARSHIPS IN DENTAL MECHANICS.—October, 1905.—Ernest James Archer and William Edwin Guilding, equal, £10 each. May, 1906.—Dudley Bayzand Tasker, £20.

JUNIOR PROFICIENCY PRIZES.—Hugh Braund Kent, £20. Charles Albert Wood, £15. Sidney John Darke, £10. Arthur Atkins Greenwood, Certificate.

THE MICHAEL HARRIS PRIZE FOR ANATOMY.—Hugh Braund Kent, £10.

THE WOOLDRIDGE MEMORIAL PRIZE FOR PHYSIOLOGY.—John Lee Atkinson, £10. Hugh Braund Kent, Certificate.

THE HILTON PRIZE FOR DISSECTIONS.—Hugh Braund Kent and William Edgar Williams, equal, £2 10s. each.

THE ARTHUR DURHAM PRIZES FOR DISSECTION.—First Year's Students.—Richard Pitt Ballard, £5. Senior Students.—Hugh Braund Kent, £15. William Edgar Williams, Certificate. Arthur Atkins Greenwood, Certificate.

DENTAL PRIZES.—First Year's Students.—Hedley Clarence Visick, £10.

TREASURER'S GOLD MEDAL FOR CLINICAL MEDICINE.—Patrick Playfair Laidlaw.

TREASURER'S GOLD MEDAL FOR CLINICAL SURGERY.—George Cockcroft.

Sir CAMERON then, addressing the students and the company generally, said:—Mr. Chairman, ladies and gentlemen,—When I received the invitation of the Dean to distribute the prizes at Guy's, and when I remembered the long list of distinguished men of science and letters and politicians who have been connected with this Hospital, it struck me that I had very poor claims to accept the honour which was offered me. Indeed, I think the only claim I can have—and it is looked upon askance in many directions—is an hereditary one. But I believe the medical profession still recognises that heredity has some claims, both for ill and for good—(laughter)—and I hope that you will suffer me for a very few minutes while I address a few words to you. I would first say that if it is in my power at any time to do anything for Guy's, or to help Guy's in any way, I am only too ready to do so. (Applause.) Almost the first word I can remember was "Guy's," and I do not think I shall be very likely to forget it. I am sure we have all listened with great interest to the report of the Dean. There is only one sad paragraph in that report, and it is that which alluded to the death of Dr. Bryant. I am sure we all re-echo the words in the report. I had the fortune to know Dr. Bryant slightly personally, and I know what a loss his death has caused to the School and to the hospital, a loss which will not be very easily replaced. Well, gentlemen, we all congratulate the prize-winners and the medallists, and we hope—I think we may say we are sure—that in the years to come they, and others of this School, will become the leaders of their profession in this country. But, in the nature of the case, all the students cannot be medallists or prize-winners. And yet, above all professions, every one who takes up this profession as his life's work, whether he be at the head of the profession, or whether he undertakes the hard, difficult, continuous work in our country districts, or in our Colonies, or elsewhere, must have a position of the greatest responsibility. And in that respect I think the Medical differs from any other profession. If we look at the politicians—and I can speak briefly for them—if you are only in a secondary position, the less opinions that you have of your own, and the less you say about them, the more faithfully you do as you are told, the better you are liked, and the more prospects you have of advancement. (Laughter.) Then, coming to another profession which I know something about, the legal profession—the rising barrister of fifty always has an eminent leader in any case. But as I have said, in the medical profession, many, and indeed most, of its members will never be in that position. The more scattered the population in the place in which they are, the harder will the work be; and yet they will have to face as difficult questions as do those who are living in our big towns and can obtain all the help they need. And they have to arrive at the most momentous decisions. Therefore, I think that a great School like this is a School that has to look forward to bringing up every one of its members as men who have to take a position of great responsibility in after life. In their work they will have no "twelve o'clock rule," they will have no courts rising at 4 o'clock. Every hour of the day, and of the night, they are liable to be called upon; and right gladly do they answer that call. And in the midst of that work they have to keep themselves abreast of all the developments of medical science, without the assistance that those who are fortunate enough to live in our great centres can obtain. And further than that, we look upon them to maintain a high standard, and to help the localities where they live, to do all they can to advance the great questions of public health upon which so much depend. We look to them to do all they can to press forward the questions of sanitation and those other great subjects which are of vital importance in all our country districts. Is it any wonder, then, that the question of medical education is one which is of the greatest importance, that every student now has to have a five years' training, I believe? And yet how little public interest is taken in these great medical schools! Why is it

We know that a, I have no doubt, well-intentioned and somewhat noisy minority spread abroad, and have been spreading abroad, the statement that the medical schools occupy themselves with vivisection. Gentlemen, let me remind you that vivisection is legal, that it is carried on in our great medical schools under the most careful supervision, but that it is, in my opinion, absolutely essential for the full training and for the advancement of medical science. (Applause.) But there is no doubt this idea has got abroad, and we do not get the support and sympathy that we ought to have. Well, Guy's at any rate can speak absolutely freely on this matter. The Governors have never supported the Medical School, either out of the money subscribed for the hospital, or out of the endowment. And that is a necessary thing now, because we have to get for our hospital all we can; and if we were not to abide by the rules which are laid down by one of the great bodies which give us this money, we should lose a very large grant. But I venture to think that this is unfortunate, and it is a very narrow view that all the money which is to be given for the healing of the sick poor must go in drugs and things of that sort. What are your hospitals? What would they be if it were not for the Staff? And if you have not a medical school where is your staff to come from? And therefore it is that the training which is given in these schools is that which is essential for the healing of the sick poor, not perhaps in the next few years, but in a very few years after that. But we have to accept things as they are, and therefore it becomes, I think, the Governors of this hospital—and I may speak as one of them—to appeal to the public for further support for the medical schools. And I should like to emphasize, with any power I have, the appeal that your Dean has made for further support and further endowment of the Medical School. We have a beginning in the shape of a few small endowments. One of our Governors, Mr. Robert Gordon—(applause)—as you know, has made a noble endowment; there is the Golding-Bird prize, and Mrs. Arthur Durham, as you have heard, has left a legacy of £1,000. And let me remind you, when you talk of these names, that the Staff appear very prominently. This School is supported almost entirely by the Staff; they have given up their rights and their privileges, and they have done all in their power to advance this great School. We cannot ask them, we ought not to ask them, to do more for the School; they have done as much as it is possible for them to do. Can you appeal to the students? They have a five years' course; they naturally cannot come, and do not come, from the wealthy section of the population, and I am told that a medical education costs, at the very least, a thousand pounds. You cannot increase the fees. Therefore you have to look to the public. And if the public would only realise the need the schools are in, I believe they would answer the appeal that is made to them. There must be hundreds and thousands of the public, the wealthy part of the public, who, if they only would think of it, owe the deepest debt of gratitude to their medical attendants. There must be thousands of them who have been through serious illnesses, and have undergone serious operations let them show their gratitude for the skill and devotion that have been shown them by doing something to help the advancement of medical science. (Applause.)

I have occupied you, I am afraid, too long. I know speeches are to be short, and I would only add one more word to the students, recalling what Sir Samuel Wilks said last night at the dinner. All you who are going out in the profession and who have joined Guy's have cast upon you, and have undertaken, a great legacy, a great trust; and a duty is thrown upon you to maintain the high tradition of Guy's, that in all your work you may have that great tradition before you. And I can speak of the motive power of a great school. I and your chairman both belonged to a great School, and I can say, although it is many years since I left that School, that if there is one motive power in my life it is the name of my old school. (Applause.)

DR. FREDERICK TAYLOR, in proposing a vote of thanks to Sir W. Cameron Gull for his presence and for distributing the prizes, said Sir Cameron had alluded to hereditary claims and connections; and he could say that for those who had been about Guy's Hospital for a long time, Sir Cameron Gull's name and presence always did awaken those associations of his connection with his father. The late Sir William Gull was one of the distinguished members of the Staff of the hospital, and he was sure Sir Cameron would pardon a few words in recollection of those times. Sir William Gull's scientific attainments were considerable, and his abilities were widely known; and he (Dr. Taylor) thought many almost regretted the time which he was led to devote to his duties before the public, and which withdrew him from that scientific work which he might have more assiduously carried out had he remained longer connected with the hospital. Sir William should be especially remembered for his great powers of oratory; he was a most able and fascinating lecturer, and a most attractive clinical teacher, attributes which impressed the minds of all who were fortunate enough to hear him. He would suggest that Sir William's faculty for oratory had descended to his son. (Applause.) All had been charmed by the address which Sir Cameron had just delivered. He had been known at Guy's for many years; he had been a Governor of the hospital, and had devoted a great deal of time to the various duties appertaining to that office; he had served on Committees—of which there were not a few—and he was constantly about the hospital, interesting himself in what was proceeding there. He had also been active in many other capacities; he had served on the School Board, and had been a Member of Parliament, and therefore the advice just listened to had come well from him. He (Dr. Taylor) was sure he was speaking for the Staff, for the students, and for the profession generally, when he thanked Sir Cameron for what he had said. But he did not hear Sir Cameron refer to the share the latter had taken in the endowment of the research to which he had alluded as being so eminently desirable. There existed now at Guy's a Gull Studentship, which was founded with a considerable

sum of money by Sir Cameron 15 years ago, and the proceeds of which enabled the Staff to give a stimulus to any distinguished student to work carefully and independently at the subject of pathology. (Applause.) He felt that that matter should be included in the vote of thanks. (Applause.)

Mr. GOLDING-BIRD (Senior Surgeon) seconded the vote. He said that the enthusiastic reception which had been given to the proposed vote showed that very few words were required from him in commendation. Still, custom required a few remarks. The presence of Sir W. Cameron Gull was an object-lesson, showing the intense interest taken by the Governors and Executive in everything concerning the School. Not infrequently a gentleman outside their own circle had been chosen to distribute the prizes, but he was quite content for one of the Governors to perform that duty. Sir W. Cameron Gull seemed to think it necessary to apologise for being his father's son. He need not have done so—(applause)—father and son followed each other in Guy's, and one found an affection for the School was inherited in the family. Even grandsons followed their grandfathers, while on the Executive itself there had been presidents who had followed their fathers there. Many remembered the old apothecary, Stocker, father and son. It was not an exhibition of nepotism; it was the fullest feeling of friendship which clung round Guy's men for all that belonged to Guy's. (Applause.)

The vote was carried by acclamation.

Sir W. CAMERON GULL, in acknowledging the vote, assured his hearers that it had been a real pleasure to him to be present, and if only a small endowment should be received as a result of any remarks he had made, he would feel more than thanked in every way.

Clubs' Union Appeal.

(Received up to Saturday, July 7th, 1906.)

	£	s.	d.
Amount previously acknowledged ...	301	0	6
C. J. Symonds, Esq., M.S., F.R.C.S. ...	25	0	0
St. J. A. M. Tolhurst, Esq.	1	1	0
	£327	1	6

Pass List.

UNIVERSITY OF OXFORD, JUNE, 1906.—SECOND M.B. EXAMINATION.—*Pathology.*—C. G. Douglas (Magdalen). *Medicine, Midwifery and Surgery.*—L. J. J. Orpen (Keble).

SECOND CONJOINT EXAMINATION, JULY, 1906.—J. Lee Atkinson, G. F. Haycraft, J. L. Johnston, F. Kolaporewalla, R. G. Oram, G. H. Peall, Q. H. Richardson.

Obituary.

John Winter Dryland,
J.P., M.R.C.S. L.M. (Eng.), L.S.A. (Lond.).

WE regret to record the death, in his seventy-third year, of an old Guy's man, Mr. J. Winter Dryland, of Kettering, Northamptonshire. He left Guy's in 1854, and after studying for a time in Paris, took the post of House-Surgeon at the Infirmary at Reading. In 1858 he settled down at Kettering, where he has been in practice ever since.

He held for forty-six years the office of Medical Officer to the Kettering Union, during which time the population of the town increased from 5,000 to 31,000, and the size of the Infirmary in proportion, until at the present time it is one of the finest in the Kingdom.

He was also Medical Officer to the Urban and Rural District Councils, and in 1871 he displayed such extraordinary energy and resource in combating single-handed a very severe epidemic of small-pox, that subsequently the Guardians presented him with a massive silver cup in recognition of his services.

In later years, largely owing to his exertions, an excellent Phthisis Sanatorium and an exceptionally well-equipped Isolation Hospital have been erected near the town.

The first ambulance lecture given in Northamptonshire was delivered by Mr. Dryland to the local Midland Railway employees, and in recognition of his work in this direction he was recently created an Associate of the Order of St. John of Jerusalem.

He was an exceptionally brilliant rider to hounds, and for over forty years was a well-known figure both with the Pytchley and the Woodland Pytchley.

Being chief officer of the local Ambulance Brigade, he was accorded a public funeral, his remains being followed from the church by over two thousand people.

Of the love and esteem in which he was held by all classes, no better proof could be given than the inscriptions on two of the wreaths, one of which stated that as a token of affection it had been made by the villagers of Weekly from flowers out of every garden in the village; and another that it came "From the Children of Weekly."

Papers by Guy's Men.

Motor Driver's Spine. By W. J. Burroughs, M.R.C.S. Eng., L.R.C.P. Lond.—*The Lancet*, 7th July, 1906.

A Case of Burrowing Tubo-ovarian Cyst, with Remarks on its Pathogenesis. By W. Sampson Handley, M.S., F.R.C.S.—*British Medical Journal*, 30th June, 1906.

A Case of Cyanosis, with Polycythæmia. By James W. Russell, M.A., M.D. Cantab., F.R.C.P. Lond.—*The Lancet*, 7th July, 1906.

The Nature of Surgical Shock. By William Sheen, M.S. Lond., F.R.C.S. Eng.—*Ibid.*, 30th June, 1906.

Remarks on Version and its Limitations.

CLINICAL LECTURE BY MR. TARGETT.

GENTLEMEN, — During the last quarter of a century certain changes have been made in the practice of obstetrics, more especially in the operative measures adopted for the treatment of difficult labour. It is well sometimes to look back and take stock of such changes in practice, for every innovation is not necessarily an advance in the science and art of our profession.

I have therefore selected one of the most ancient of obstetric operations, namely, turning, and I propose to offer a few remarks on the modern indications for version and to inquire what are its limitations.

The chief reason for choosing version as my subject is because in most instances this operation is not performed in the interests of the child. It is universally acknowledged to be attended with a considerable and often high fœtal mortality. We hear much in the present day about the declining birth-rate, and though I hold no alarmist views on the matter, yet I think the time has arrived when more interest is being taken in the preservation of the lives of infants, both by better management of labour and by greater attention to the details of feeding. In this way we may reasonably hope to combat some of the loss to the State due to the diminished birth-rate. The mother's life is, and will always be, of the first importance. When that has been secured, it becomes our next duty to adopt such a line of treatment in cases of difficult labour as shall best serve the interests of the unborn child.

Transverse presentations.—This is such an obvious indication for version that little need be said on the subject. The turning of a cross-birth into a more favourable position for delivery must have been one of the most ancient of obstetric operations, though it is generally stated that *podalic* version was not introduced until the sixteenth century by Ambrose Paré and his pupils about 1550. Even so the operation is much older than the use of the forceps, for that instrument, though invented about 1630, did not become generally known until fully a hundred years later, by the description and plate first published in 1735 by Dr. Chapman.

In the treatment of transverse presentations, version may be said to have no limits, except such as are imposed by toxic contraction of the uterus, or when the pregnancy is complicated with tumours or contraction of the pelvis in the higher degrees. Under these circumstances the pelvic obstruction may be the more important feature of the case, and will consequently decide the mode of treatment. In reading over the description of the operation of turning as given by Dr. Playfair, twenty-five years ago, I find that though there is nothing of importance to add to it, certain minor details are worthy of consideration. Thus, he emphasises the—

1. Value of anæsthesia in difficult cases of version. Now, the general teaching is to give chloroform in all cases, and to the surgical extent. That it adds to the ease and rapidi y of the operation there can be no doubt, but I think there are two disadvantages, viz., (1) the suppression of the pains, especially if the patient is already tired and in want of sleep; and (2) the bad effects of chloroform upon the child in some instances, which may turn the scale against it when already distressed. Both these objections should be borne in mind and as far as possible prevented. After the turning is completed, the anæsthetic should be stopped and the delivery left to nature. It is the hurried extraction, not the actual version, which kills the child.

2. The second point is the position of the patient. Assuming that she is under anæsthesia, it matters not whether she is placed in the lithotomy position or the ordinary lateral obstetric position. I find that students usually prefer the lithotomy position, and it is easier to teach them thus. The majority are more skilful with their right hand for internal manipulations, and they seem to follow out the stages of the operation more intelligently when it is performed in the dorsal position. Personally, I prefer the left lateral position for the bipolar method, using the left hand in the vagina; but in any case of difficulty, or when the membranes are ruptured, I advise the dorsal posture.

3. The next point is the use of rubber gloves. I have no experience of them in obstetric work, but they are specially recommended for internal version, because when dipped in lysol after being boiled, they have a slippery surface, and thus the friction between the hand and the uterine wall is greatly diminished. One knows that when the uterus is moulded down firmly to the fœtus, this friction adds much to the difficulties of the operation, and I am prepared to believe that the use of rubber gloves under

such circumstances may be distinctly advantageous.

4. My last point is the displacement of the arms. I do not think that sufficient stress is laid upon the fact that in turning the child, no matter how gently and skilfully it may be done, the arms always become displaced from their natural position—folded upon the chest. It by no means follows that they will become extended alongside of the head, though that not infrequently happens if the extraction of the fœtus is in any way hurried. The delay caused by the extended arms in the delivery of the after-coming head must be the reason why the fœtal mortality of version is so much higher than that of ordinary breech labour.

Placenta prævia.—We pass on to consider this indication for version which is next in importance to transverse presentations. In 1881, Dr. Playfair writes: "Turning has long been considered *the* remedy *par excellence* in placenta prævia." He adds an expression of his own opinion that "it is of unquestionable value in suitable cases; but much harm has been done when it has been practised before the os was sufficiently dilated to admit of the passage of the hand." Sufficient merit is not allowed in this account to the method of bipolar version for placenta prævia which was first introduced by Dr. Braxton Hicks as far back as 1860. This mode of treatment has always been popular at Guy's Hospital, the majority of cases of placenta prævia in the Lying-in Charity having been treated in this way up to the present time. Its chief drawback is the increased risk to the child, though in other respects the method is most satisfactory. It must be remembered that the risk of placenta prævia to the child's life is considerable, whatever mode of treatment is adopted. The child is frequently premature (seven to eight months), and in distress from the partial asphyxia due to the interruption of the circulation by the more or less extensive detachment of the placenta. Version increases these difficulties by adding some delay in the delivery of the after-coming head due to the imperfectly dilated cervix. It must also be borne in mind that the cervix forms a much more rigid ring when the case is premature than at full term. This ring tightly grips the body of the child and necessarily produces extension of the arms if the extraction is at all hurried. Thus there is an increased difficulty in delivery of the after-coming head, and if the child is premature its life is almost invariably sacrificed.

About 1888, the hydrostatic dilating bag, known by the name of Champetier de Ribes' bag, was introduced for the purpose of inducing premature labour. Its inventor suggested that it might also be useful for cases of placenta prævia, though it was not introduced for that purpose. The bag is conical in shape, and when fully distended its larger end corresponds in diameter with that of the fœtal head as it is expelled in normal labour at term. Hence, when the fully distended bag has passed through the cervix uteri, the fœtal head is able to follow without delay. While the merits of this instrument have been generally recognised, it must be admitted that it has not been widely adopted outside hospital practice. Various objections were raised to its use at the time of its introduction; for example, it was thought likely to cause sepsis, to lead to rupture of the lower uterine segment, and to replace the vertex by an unfavourable presentation. None of these objections has, however, proved valid, and the chief reason for the failure of the bag in general practice is to be found in the composition of the bag itself. The rubber solution with which its silk lining is covered is apt to perish, and leaks readily occur at the seams. Hence, at the moment when it is required urgently, the bag is too often out of repair. Improvements are, however, being made in its structure, and it cannot be beyond the wit of man to perfect this otherwise valuable instrument.

In hospital practice, where many more opportunities for its use are met with, and where fresh bags can be readily obtained, this method of treating placenta prævia is becoming more fashionable, and it has largely taken the place of version. Thus, at Queen Charlotte's Hospital, during 1905, there were fourteen cases of placenta prævia under treatment (in 1,544 labours = 1 in 110). Of these fourteen cases, ten were treated by Champetier de Ribes' bag, and only four by version. The immediate fœtal mortality was 50 per cent., and as two more infants died shortly after birth, the whole death-rate for the children (nine in number) amounted to 64 per cent. It should be added that five of these nine infants were premature, and that fact probably explains a large proportion of this high fœtal mortality.

At Guy's Hospital during the same period (1905) the number of cases under treatment was thirteen, and it must be confessed that the results of treatment as regards the life of the child were even less satisfactory. Thus, of the thirteen cases, eight were treated by version

with a fœtal mortality of 100 per cent., though here also several of the infants were very premature. In spite of this high mortality from version, I am inclined to believe that it must remain as the best mode of treatment for placenta prævia in general practice until a thoroughly satisfactory hydrostatic bag has been invented. The manipulations involved in the use of this bag are not more than those of bipolar version, and an anæsthetic is by no means always necessary, whereas we have already seen that chloroform is almost essential for successful turning. In hospital practice the bag should be employed in preference to turning, except where forceps can be applied, or where the fœtus is so premature as to have little or no chance of surviving under any circumstances.

Accidental hæmorrhage.—The consideration of placenta prævia naturally leads to the subject of accidental hæmorrhage. In 1881 the treatment of this grave condition was summed up in the following terse directions:—Rupture the membranes, give ergot, and apply a tight binder. If the hæmorrhage continued, version or forceps was indicated. Not a word is said in Playfair's Text-book about plugging the vagina. This practice has had a curious history. It was introduced about 1775 by Dr. Rigby, who first drew a scientific distinction between placenta prævia and accidental hæmorrhage. For many years plugging the vagina for accidental hæmorrhage remained in favour, until in the latter half of the last century it was replaced by rupture of the membranes or version, as above described. The feeling against plugging the vagina for this variety of bleeding became so strong about twenty or thirty years ago that a candidate was certain to be "ploughed" at an examination if he was so incautious as to recommend it. But now the fashion has again changed, and for the past ten years the Dublin School have strongly advocated the treatment of accidental hæmorrhage (not the concealed variety) by a carefully adjusted vaginal tampon and tight binder without rupture of the membranes. It is beyond the scope of our subject to consider this matter in full, but my personal experience is in favour of it, and as it needs no special appliances, but can be carried out anywhere and at any time, it would seem to be the best mode of treatment for general adoption. Rupture of the membranes is, then, reserved for those cases in which labour has definitely begun and uterine contractions are strong, but at the same time considerable external bleeding continues. Such cases are not the rule, and in them version might precede the rupture of the membranes, with the view of hastening delivery, though the child's life is almost certain to be sacrificed thereby. The statistics from the Rotunda Hospital show that in seven years up to 1900, fifty-seven cases of external accidental hæmorrhage were treated by plugging with only one death, the patient being moribund on admission. The prognosis for the child is very bad in these cases; it has been placed at 85–90 per cent. Probably this is mainly due to prematurity and asphyxia from disturbance of the placental circulation.

The best treatment for concealed accidental hæmorrhage is still under discussion. It would take us beyond our time to deal with it, but I will sum up these remarks on ante-partum hæmorrhage by saying that version is still the best mode of treating placenta prævia in general practice, but that it has a very limited use in accidental hæmorrhage in which vaginal plugging or rupture of the membranes is to be preferred.

Contracted pelvis.—When we come to consider the treatment of contracted pelvis there can be no question that important changes have been made during the past twenty-five years. Of these may be mentioned the introduction and increasing popularity of the axis-traction forceps, and the revival of Cæsarian section. About 1877, Tarnier devised the mechanism whereby traction was applied directly to the blades by means of two rods separate from the ordinary handles of the forceps. Various improvements in this mechanism have been made, but though the principles upon which this forceps is constructed are now generally accepted, it must be admitted that the instrument has made but slow progress in the favour of British obstetricians.

In 1879, a prolonged and memorable debate occurred at the Obstetrical Society of London upon "The use of Forceps and its alternatives in lingering labour." The debate occupied three whole evenings, and all the leading obstetricians of the United Kingdom took part in it. At that time it was not a question of the employment of any particular type of forceps, but whether in simple cases of delayed labour not due to any serious obstruction, the patient should be given ergot or treated by forceps or version. The great majority of those present were in favour of the use of the forceps, at least in what is called the low operation; and where the delay occurred at the brim they advised that the forceps should be tried first, and that

version should be regarded as an alternative to craniotomy when the forceps had failed. Version was thus shown to have declined in favour as a mode of treatment for delay at the brim since the time when it was so powerfully advocated by Sir James Simpson in 1850. He pointed out two advantages gained by the after-coming head when there was simple flattening of the brim. The smallest diameter of the base entered first like a wedge and allowed better moulding of the vault. Moreover the largest transverse diameter (the biparietal) was able to escape the contracted conjugate of the brim and be replaced by the smaller bitemporal diameter as long as there was sufficient room on either side of the middle line. These are real mechanical advantages in overcoming the obstruction, but unfortunately they do not contribute much to the safety of the child's life. Too often there is still so much delay in extracting the head that the infant is born dead. For this variety of pelvic contraction there can be no doubt now that the axis-traction forceps is specially suited, and if the degree of flattening is not high (*e.g.*, not under three and a half inches) the delivery of a living child of average size at term should be effected. It must, however, be pointed out that the simple flat pelvis, not reduced in its transverse measurements, is much rarer than the generally contracted pelvis; at least, that is our experience at Guy's Hospital. (In New York and Baltimore the generally contracted to flattened pelvis was found to be as 109 : 59, or as 2 : 1.) For the generally contracted pelvis, version has never been advocated, and therefore its treatment does not fall within the scope of this paper.

If the use of axis-traction forceps is to replace turning in all cases of moderate flattening of the brim, it may be asked, "Has version no place in the treatment of contracted pelvis?" Some authorities advise it as a routine measure after perforation of the head instead of using the cephalotribe. Several objections to this procedure will at once be raised. The uterus is likely to be so moulded to the fœtus by the time craniotomy is indicated that turning would be very difficult and involve considerable risk of rupture of the lower thinned-out segment of the uterus. Secondly, the escape of brain matter into the uterine cavity is not desirable, because it is apt to decompose quickly if not thoroughly washed away. Moreover, the mere perforation of the skull does not much reduce the size of the head except in cases of hydrocephalus, although it permits of a greater degree of moulding as it passes through the narrowed brim. The modern cephalotribe introduced by Dr. Braxton Hicks in 1866, and during recent years made somewhat lighter, is so admirably fitted for its purpose that at Guy's we regard it as an essential constituent of the obstetric bag, and its use becomes the natural sequence to perforation of the head. On two or three occasions, however, version has proved very useful to me in dealing with difficult cases of cephalotripsy. Some years ago I was called to a confinement and found that the cephalotribe had already been applied by the doctor in attendance. But owing to marked general contraction of the pelvis, the body of the child could not be delivered. I re-applied the cephalotribe in order to ensure complete crushing of the head, yet to no purpose. Examination showed that the shoulders would not pass through the inlet. Fortunately the uterus was not firmly moulded to the fœtus, and the patient being well under chloroform, I was able to turn and bring down the breech. The result was most satisfactory, for the arms became completely extended by the side of the already crushed head, and so passed through easily. This unexpected success impressed me favourably, and since that time I have had the opportunity of repeating the manœuvre when, after cephalotripsy, the extraction of the trunk was difficult owing to bulky shoulders or large chest.

Of late years the practice of version for contracted pelvis has been revived in Germany under the term of "Prophylactic Version." By this is meant the performance of version before any complication has arisen in the condition of the mother or child with the object of avoiding those dangers which might occur if labour proceeded with the vertex presenting. For the success of this method it is asserted that the membranes must be unruptured and the os fully dilated. Version is then a simple proceeding, and in the lesser degrees of contraction delivery can be rapidly completed. But in precisely the same class of case labour will often terminate spontaneously with success, or assistance may be given with axis-traction forceps involving a very slight risk to the child. Moreover, the above-mentioned conditions—membranes unruptured, os fully dilated—will be frequently absent. For in contracted pelvis of the flattened type, premature rupture of the membranes is the rule, and the os will not be fully dilated though it may become soft and dilatable.

At Queen Charlotte's Hospital, during 1905, sixty-four cases of contracted pelvis were under treatment. Of these in only six instances was

version performed, and then for some special reason, such as transverse presentation, prolapse of cord, etc. In one case only had forceps failed, and version was performed, but the child was born dead. From this report we may conclude that the physicians of Queen Charlotte's Hospital are not in favour of prophylactic version, and the practice has never been adopted at Guy's within recent years. On the other hand, we find it strongly recommended in the Manual of Midwifery, by Dr. Henry Jellett, representing the work of the Rotunda and other Irish hospitals. It is true he recognises certain disadvantages: the delivery of the head must be rapidly effected to save the life of the child; it is only applicable to flattened pelvis; if the method fails there is a greatly increased difficulty in perforation and extraction of the after-coming head. These seem to me very serious objections, and I cannot think that it is a mode of treatment for contracted pelvis which is likely to be widely adopted in general practice.

One other point in the returns of the Queen Charlotte's Hospital is noteworthy. Out of sixty-four cases of well-marked contraction of the pelvis no less than fourteen were delivered spontaneously with the loss of only two infants, one of which was macerated and the other was hydrocephalic. These results are so excellent that they could not be improved by prophylactic version or any other form of operative interference; they also emphasize the importance of giving uterine action a sufficient amount of time in the lesser degrees of contraction before proceeding to the use of axis-traction forceps.

There are a few other complications of contracted pelvis not yet mentioned in which podalic version may be required, such as transverse presentations, face presentations, and prolapse of the cord. In all of these the prognosis for the child would be bad under any circumstances, and alternative modes of treatment to version might be considered in each instance. I will not, however, consider them further, but will turn to the second improvement in the management of contracted pelvis mentioned above, viz., the revival of Cæsarian section.

It is impossible at the present time to refuse to recognise the great value of this operation, whatever may have been the horrors of its past history. I cannot help thinking that it is much more scientific, in reality less dangerous, and is attended with better ultimate results than its competitor, symphyseotomy. The latter operation has never been popular in England, and I see no likelihood at present of its becoming so. Both of them are major obstetric operations requiring all the preparations and appliances of modern surgery, and consequently they can rarely be carried out in general practice. Symphyseotomy has, therefore, no advantage on the ground of simplicity. My own experience of Cæsarian section is limited to eight cases, and though I have not succeeded in saving all the infants, there has happily been no maternal death. There were ten cases at Queen Charlotte's last year, with only one maternal death, due to peritonitis following impaction of a dermoid cyst in Douglas's pouch. All but two of the infants survived. In my last case the mother commenced suckling her baby within forty-eight hours of the operation, and continued to do so throughout her stay in the hospital.

My views with regard to contracted pelvis are in favour of a more frequent resort to Cæsarian section in the higher degrees of general contraction when previous experience has shown that there is considerable difficulty in delivery, or when induction of premature labour has not succeeded in obtaining a living child. On three or four occasions I have known induction of labour for contracted pelvis to be followed by spontaneous version, with uniformly disastrous results to the life of the child.

Appointments.

DR. W. BRAMLEY TAYLOR has been placed on the Commission of the Peace.

Civil.

BROMLEY, J., M.R.C.S., L.R.C.P., has been appointed District Medical Officer of the Halstead Union.

ODGERS, M.B., M.A., M.Ch. Oxon., F.R.C.S., has been appointed Assistant-Surgeon to the General Hospital, Northampton.

PIERREPONT, E. SPENCER, L.D.S., has been appointed Dental Surgeon to the East London Hospital for Children and Dispensary for Women, Shadwell, E.

PIPER, STANLEY A., L.D.S., has been appointed Honorary Dental Surgeon to Kingston Hill Hospital.

RING, C. A. E., L.R.C.P., D.S. Edin., L.F.P.S. Glasg., has been appointed District Medical Officer by the Okehampton (Devon) Board of Guardians; also Certifying Surgeon, under the Factory and Workshop Act, for the Hatherleigh District of the County of Devon.

Naval.

Fleet Surgeon EDWARD R. D. FASKEN, R.N., has been appointed to the *Implacable*, and Staff Surgeon FREDERICK D. LUMLEY, R.N., to the *Nile*, on recommissioning.

The Biennial Festival Dinner.

THE Guy's Hospital Biennial Festival Dinner was held on Tuesday, July 3rd, in the Victoria Hall, at the Hotel Cecil. The chair was taken, at a quarter to seven, by the Senior Surgeon of the hospital, Mr. C. H. Golding-Bird, who was supported at the chief table by Mr. Cosmo Bonsor, Sir Samuel Wilks, Sir Constantine Holman, Sir H. Howse, Surgeon-General Branfoot, C.I.E., the Hon. C. J. Goschen, Sir Wm. Cameron Gull, Dr. Pavy, Sir Thomas Stevenson, Dr. Pye-Smith, Prof. Debus, Dr. F. Taylor, Sir F. Wills, Dr. Galabin, Dr. Armitage, Mr. Clement Lucas, Dr. J. Bisschopp (a veteran Guy's man, who could look back to attending a similar function sixty years ago), Dr. Martin, Mr. F. Norman, Dr. Savage, Dr. Laidlaw Purves, Dr. Oldham, Mr. Hoare, Dr. Dalton, Mr. F. Cann, Dr. Ince, and Dr. P. Minns. At the fourteen side tables, presided over respectively by Mr. Targett, Mr. Lane, Sir Cooper Perry, Mr. Symonds, Dr. H. White, Mr. Dunn, Dr. Fawcett, Dr. Eason, Mr. Steward, Mr. Maggs, Dr. Newton Pitt (Hon. Sec.), Dr. Beddard, Dr. French, and Mr. Rowlands, some two hundred students, past and present, sat down to an admirably-served dinner.

Mr. GOLDING-BIRD, in a short and felicitously-worded speech, proposed the health of His Majesty the King, the first member of our profession, and when this toast had been duly honoured, the health of Her Majesty the Queen, the Prince and Princess of Wales and the other members of the Royal Family. Following this, the Chairman proposed "Prosperity to Guy's Hospital and its Medical School." In the course of his remarks, Mr. Golding-Bird said he found there was an invitation card extant, bearing date as far back as 1827, which invited the students of Guy's and St. Thomas' Hospitals to a festival dinner at the London Tavern. At that time the two hospitals ran together, and about that time, too, the United Hospitals' Club was founded, the members of which met and dined together periodically. As a matter of fact, he preferred to look upon the festival dinner itself as a club dinner, and as such it had its obvious advantages in promoting good fellowship between Guy's men. Every student of Guy's was a member of that great Club, the Guy's Club, for all of them held interests in common. He ventured to think that if Stanley had been a Guy's man his famous reception of Dr. Livingstone would, perhaps, have been slightly different. Instead of dressing himself in his best suit and bowing elaborately, with the remark, "Dr. Livingstone, I presume?" he would have said, "Hello, old chap, didn't we both dress to Teddy?" for that was the usual spirit in which one Guy's man accosted another. He felt it was necessary for him to go into details as to why they should join with him in wishing prosperity to the great institution to which they all belonged. The hospital and the Medical School had made great strides during the last few years, and they owed a great deal to the present Treasurer, whose name he would couple with the toast, and whose health he would ask them to drink.

The toast having been drunk with musical honours, Mr. COSMO BONSOR rose to reply. He commenced by saying that he considered it a great honour to be called upon to respond to the toast, and thanked them for the manner in which they had received it. To a great extent the Treasurer's sun had set. He no longer even had a house within the hospital precincts: he only had the privilege of sharing a room with the House Committee. But for all that he could still take an interest in the hospital, and in the continued prosperity, success and welfare of the Medical School. He would ask them to bear in mind that the Medical School as a training institution stood very high. (Applause.) The fact that two outside hospitals—those of St. George and Charing Cross—had filled vacancies on their staff by appointing Guy's men was a proof of this, for it showed that the great hospitals looked to Guy's and came to our School for their staff. It had been a boast of the Medical School that it had never been subsidised. Not a penny out of the general funds had gone to it, and it was absolutely self-supporting. (Applause.) To a great extent this success, both of the School and of the hospital, was due to the self-sacrifice of the medical and surgical staff—(applause)—whose ardent support was unparalleled in the history of any school. He would ask those present, however, to bear in mind that the School deserved and needed the support of every Guy's man. It looked for aid to the men who had benefited by it, and he was sure it would not look in vain. He thanked them for their support in the past, and confidently looked forward to their continued support in the future. (Applause.)

Dr. TAYLOR proposed "The Consulting Staff," to which Dr. Pye-Smith and Sir Samuel Wilks replied. In the course of his remarks Sir Samuel said he stood on a somewhat different footing from the rest of his colleagues, and perhaps his state of mind was different from theirs. Most of those present had the future to look forward to; his life was almost at an end. (No, no.) He could look back upon his medical career with some satisfaction, for he had tried to do his best. They had heard that night about the Treasurers of Guy's, and about Mr. Treasurer Harrison, who, with all his despotism, had at heart the real interests of the hospital. Well, to-day they had managed, in spite of Guy's will, to convert the despotism into a system of constitutional government. (Applause.) They had seen many and great advances, a new order of things, in fact. To what was it all due? What did these things mean, these new laboratories which had cost so much? It meant the advent of a new instrument—the microscope—which had opened up a new world, given them a new science, that of histology, and taught them new methods. When he looked back on what was known in his student days, in particular on Mr. Bransby Cooper's Lectures on the structure of the liver, he could realise how much they owed to the microscope. "I have nothing now to do but to think things over, and I can safely say that to my

mind medicine has made its greatest advances during the last half century. We stuck to Galen for a thousand years and more. Now we have not only new observations, but new methods, and in giving these to the world Guy's has had no little share." (Applause.)

Finally Dr. HALE WHITE proposed the Chairman's health, paying a high tribute to Mr. Golding-Bird's thoroughness as teacher and surgeon. He remembered, for instance, how vague had been his ideas about the folding of the peritoneum till Mr. Golding-Bird, then in the dissecting-room, had given a practical illustration with the aid of a wooden model and a piece of cloth. "Since then," said Dr. Hale White, "my knowledge of the peritoneum has been more satisfactory."

The Chairman, in response, expressed his thanks, and proposed the health of the Honorary Secretary, Dr. Newton Pitt, to whose efforts the success of the dinner was so largely due. The toast was drunk with acclamation, and Dr. Pitt briefly replied. The function was concluded with the singing of "Auld Lang Syne." Everyone attending the dinner was presented with a festival photogravure of the "Founders and Makers of Guy's Hospital."

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Debating Society.

SIR,—It is quite evident that the Secretaries of the Debating Society have no reasonable excuse for not giving proper notice of the General Meeting held on June 7th, otherwise they would not have refused to discuss the matter in your columns. In spite of anything they may assume to the contrary, the GAZETTE—as "the recognized organ of the Constituent Institutions of the Clubs' Union"—is a perfectly legitimate medium in which to discuss the affairs of any constituent society.

However, if the Secretaries performed their duty and called General Meetings in a proper manner, there would never be any necessity to discuss business matters in your journal. As things stand at present, I can only appeal to those of your readers who are interested in the well-being of the Society to attend the first debate next Session, when this matter will be discussed as private business.

As to the Secretaries' pointless and unmannerly criticism of my "nom de plume," I will not waste your valuable space by giving any reply to such a trivial and undignified piece of bickering.—Yours faithfully,

July 10th, 1906. T. TURNER O'CALLAGHAN.

DEAR SIR,—Because the seven days' notice of the Debating Society's last General Meeting, which its rules require, was not given, I ventured to enquire, through the medium of your columns, if the rules of that Society existed for use or for ornament.

In reply, the Secretaries state that private business can only be discussed by them at a General Meeting, and that they decline to discuss it in your columns.

Since a protest was made at the last General Meeting as to its legality, and ignored by the one Secretary present, and since the Secretaries decline to discuss the matter in the Clubs' Union official publication, it seems that the Secretaries are sitting, for the present, on a tolerably high fence.

When I wrote my previous letter I was unaware that the Secretaries of the Debating Society were authorities on "noms-de-plume."

I therefore beg to state how grieved I am to have incurred their displeasure by means of the title I have adopted, and I trust that they will attribute, not to a lack of reverence for their erudition, but rather to the boldness of youth, my audacity in continuing—in spite of the criticism they have passed upon my nom-de-plume—to subscribe myself—Yours faithfully,

DRUOFLAT.

Carbohydrate Metabolism and Diabetes.

SIR,—I ask you to allow me to say a few words upon the notice that appeared in your last issue on my recently-published work on "Carbohydrate Metabolism and Diabetes." I am sorry to have offended the feelings of the reviewer by the manner in which I dealt with the glycogenic theory. I am reproved for having throughout the volume taken "every opportunity of attacking the glycogenic theory of Bernard," and in the next sentence run the words: "It would seem, however, that the author accepts the principal points of the theory, with only slight modification." Writing in this way, it is evident that the reviewer has failed to grasp the reality of the situation. As a matter of fact, the two views are diametrically opposed in the issue involved. Sugar is a small molecular body, and as such flows off with the urinary water in connection with the transit of blood through the kidney. If, as is contended for under the glycogenic doctrine, the carbohydrate of our food passed through the circulation, from the seat of entry into the system to that of utilisation in the tissues, under the form of free sugar, we should be all of us glycosuric, in proportion to the extent of the occurrence, in correspondence with what happens in association with diabetes. To be kept out of the urine, sugar, viewed as free sugar, must be kept out of the general circulation. If linked on to proteid, as I have suggested it is—and the condition is now generally accepted as existing—the sugar is held safe from escape with the urine on account of the proteid molecule being too large to pass out with the urinary water in the transit of the blood through the vessels of the kidney. The "slight modification" of your reviewer resolves itself into whether we are all of us to hold the same position as the diabetic or not.—I am, sir, your obedient servant,

F. W. PAVY.

Grosvenor Street, July 9th, 1906.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-sixth List of Collections.

(Received up to Friday, July 13th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections.

Name.	Shillings.
Amount previously acknowledged ...	72,946½
Anonymous—A Grateful Patient in Charity, 42; E. F. T., 10½; Edith Morgan, 2; Mrs. Harding, 5; M. R., 21; A Friend, 5; Anonymous, 10; E. and G. Hope, 20; Charlie and Ethel Brown, 6; two little Patients, 3; G. H. and M. Toogood, 60; Grateful, 21; S. T. M., 10; In memory of A. P., 21; F. and R. T. W., 40; Molly Garland, 10½; Freddie Newland, 2½; Three Friends at Balham, 21; Gerald Barton, 4½; Mrs. Edmonds, 21	336
Bisshopp, Dr. F. R. (736s.)—B. S. D., 42; Miss Lushington, 10	52
Bright, Sister (956s.)—An old Patient	7
Bulmer, Miss F. de (25s.)—H. C. Stroner... ...	1
Dorcas, Sister (766½s.)—Miss King	5
Faull, Miss (23⅓s.)—Collection	4
Harper, R. S. (36s.)—Miss Charlton	1
Hyde, Miss (17s.)—Anonymous	5
Iles, Miss M. G.—Collection...	17
Lazarus, Sister (30s.)—Mr. Rousett, 100; Mrs. Lampitt's Collection, 4	104
Luke, Sister (131s.)—Mrs. Mitchell	126
Rawlings, Miss—Collection	5
	73,609½
Further collections from sources outside the Hospital	12
TOTAL (up to 13th inst.)	73,621½

Change of Address.

Colonel H. J. W. Barrow, R.A.M.C., from Mian Mir to Dalhousie.

Mr. W. E. Freeman, L.D.S., from Guy's Hospital to 77, North Side, Clapham Common, S.W.

Dr. A. E. F. Kynaston, from Windlesham Court, Surrey, to 19, Lanark Mansions, Maida Vale, W.

Mr. N. B. Odgers, M.Ch., F.R.C.S., from 8, St. Thomas's Street, to 16, Castilian Street, Northampton.

Lieutenant F. M. M. Ommanney, R.A.M.C., from Somaliland to Woolwich.

Mr. Stanley A. Piper, L.D.S., from Guy's Hospital, to 291, Regent Street, W., and to Gullane, Coombe Road, Kingston Hill, Surrey.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Notes from Paris.

French Nurses.

My first meeting with a French nurse was at a dentist's in London some years ago, on the occasion of my giving an anæsthetic.

The patient, a French artist from a music hall, was accompanied by a vigorous-looking young French woman, who insisting on remained in the room during the operation, which consisted of a general clearance of the mouth. Each extraction seemed to give some corresponding tug at the young woman's nervous system; and when the last stump left its socket, she leapt forward, and, by a sudden sweeping movement, brushed aside both dentist and anæsthetist! "I know what I do," she exclaimed, "I have been in the hospitals of Paris!" Her attitude was so menacing that we, being only men, did not interfere, but were content with merely watching from a distance the efforts of the ci-devant nurse to revive her "*cher ami*" in her own way.

My next meeting with a French nurse was at the Hôtel Dieu, in Paris. It was before the total abolition of the Sisters of Charity in the French hospitals, when the Hôtel Dieu, the St. Louis and the Boucicaut hospitals were still nursed by the "religious." During the progress of an operation, something went wrong with the anæsthetic. The patient stopped breathing. The assistants rushed for the oxygen bag. A fat, white-clothed "Sister" hurled herself upon a group of onlookers at the end of the operating table. It was a terrible squash, but the devout nun got through us like a white corpuscle through a vascular wall. In a flash she pounced upon a pair of tongue forceps, and back again she charged through the group of men and women students, and before anyone could say "Jacques Robinson," she had retracted the patient's tongue and made him breathe again. Imagine an English nurse having to come to the rescue at an operation in a British hospital! She was an experienced old stager who certainly had her wits about her.

The vexed question of the religious versus the lay nurse has now been settled in France. There is no doubt the "nuns" did their best for the love of the thing, but they were untrained, and their views as to the healing of the sick were so overshadowed by their religious views that their employment was not a success. I am told that patients who did not conform to the "Sisters'" views in regard to certain religious practices were slighted while under their care. Now, on the other hand, under the new régime of the lay nurses, I hear that it costs twenty francs to get a priest summoned to a patient! Of course, I do not vouch for the truth of this last statement, but it is a well-known fact that in the Paris hospitals the patients "tip" their nurses for services rendered. To us this seems an astonishing state of affairs, but when we see the sort of persons who

nurse in the French hospitals, we can understand it better. Any female appears to be eligible; a good scrubber of floors by preference, it would seem, for the nurses clean the wards as well as tend the patients. In many hospitals old patients are taken on as nurses to give them "a job." A half-vanished nose, a facial scar of healed lupus are cases I can recall of such apparent qualifications for the post of hospital nurse. Widows, too, in the lower classes seem to look to the hospital as a means of livelihood.

My first sight of the new lay nurse on duty was at the funeral of Louise Michel, the anarchist. I went to see this funeral with a view to writing about a French mob. At the corner of one of the streets that lead to the gates of the Levallois Cemetery I saw the latest type of nurse in company with a male nurse, who was carrying a stretcher. Her head was jauntily cocked on one side, showing the red-and-black rosette in her headgear; her hands, spread out, rested on her hips—the favourite pose of the French nurse. Suspended from the shoulder hung a white canvas bag with dressings ready for the wounded, should there be a row, which the eight thousand soldiers gathered about the locality rather invited. Whether she and others on duty that day had much to do I do not know, but I can well believe it, for the crush was awful where I stood, wedged in on all sides by various specimens of Paris *apaches*.

The present conditions are now in a state of transition, and possibly a better system will come out of it. The municipal authorities have established a nursing school, where classes are held and lectures given. Nursing pupils attend from the hospitals in the evening after their twelve hours on duty. The examination for the school diploma is generally taken after a year's hospital work, but anyone can go in for it without giving any evidence of hospital experience. Private nurses take it, and start private nursing without any hospital training. Many hospital nurses never take the diploma, but without it they are ineligible for the post of "suppléante"—a sort of head nurse in a ward. A "surveillante" is like a "sister" with us. French doctors who know our nurse training system envy us, but it will take a long time yet to get matters differently managed.

There are several private nursing institutions where efforts are being made to get a better class of nurses trained. I went to see one in the Latin quarter, and endeavoured to "interview" the energetic lady who was styled the "Présidente Fondatrice." She spoke English, and she poured forth a stream of words on the merits of her institution. It appeared that she has been working for some years to train nurses for private nursing. With that idea she has also established a private hospital for paying patients. The institution is largely supported by public subscriptions.

I did not talk very long with the "Présidente Fondatrice," for she had to go to an appointment, but she presented me with the report of her association, and handed me over to the care of a young English nurse who was being trained at the institution. With Mademoiselle X. as guide, I made a tour of the place. Everywhere spotless cleanliness reigned in a manner truly French. I saw the spacious dining hall, the lecture room furnished with coloured diagrams, a skeleton, and the orthodox black-board, then the kitchen, and, lastly, the neat little bedrooms furnished with such rigid trimness that almost gave one the idea that they were never occupied.

On the top floor, with its view over the chimney-pots of the Latin quarter, my guide showed me her own little sanctum. Here there was colour of old England. The pictures on the walls were of familiar scenes at home; articles and ornaments about the room were English, and the fair-haired figure before me looked typical daughter of Albion. I learnt that for two years the probationer pays the equivalent of £32 a year for board, lodging and training. At the end of the first year of pupilage, the pupil must make a contract to serve for four years with the association—one year as pupil and three years as assistant in the active service of the society. Should the nurse fail to carry out her contract, she agrees to refund certain sums varying according to her time of training. During her three years of active service she is paid a salary of £48 per annum with board and lodging. At the end of five years' total experience the nurse receives a certificate. The minimum charge for a trained nurse is ten francs a day, which is paid to the institution. Such are the arrangements for private nurses. It is a movement distinct from the "Assistance Publique," which moves more slowly towards the amelioration of the nursing in the public hospitals of Paris.

FREDERIC VICARS, M.D.

June 4th, 1906.

Dental News.

The following cases, which may be of interest, have been admitted to the Dental Department during the past week:—

Case 1.—F. R., of German nationality, æt. 16, showed a small, discoloured, conical supernumerary incisor presenting between the central incisors of the mandible. The two laterals (centrals?) were missing; the remainder of the teeth present were normal. She stated that, as regards the supernumerary, precisely the same condition exists in the mouths of her grandmother, brother, one of her sisters and cousin, though her parents' teeth were without it. She could not say whether in their cases such a tooth had ever been removed at any time.

Case 2.—*Fracture of the mandible.*—Patient, a boy æt. 4, was admitted to the Front Surgery, a wheel of a cab having passed over his face; the left side showed some laceration, while the jaw was fractured on the right side between $\overline{3}\,\overline{2}\,|$. Owing to the fact that he was suffering from ringworm it was impossible to take him in. An impression was taken and a splint made to the corrected model. As all the teeth were present, the form of splint adopted was a Tomes' modification of

a Mütter's clamp. It was found necessary to fix the splint three times, as the boy could not be watched properly, and was allowed to meddle with it. Eventually, by tying his arms to his sides, this difficulty was overcome, and the splint satisfactorily adjusted. It will be seen that this is a point of some importance in treating fractured jaws in young children.

Sport.

Cricket.

GUY'S "A" v. LONDON "A."

INTER-HOSPITAL JUNIOR CUP TIE.

This match was played at Chiswick on Tuesday. London won the toss and decided to bat, but were all out for 116, Ticehurst taking six wickets for 50, and Clarke two for 1 run. Pollard played well for London, scoring 45 not out, and for us, Clarke (38) was the most successful. Rutter and Ticehurst hit off the remaining runs just on time, leaving us winners by two wickets. Bart.'s have now to be met in the final, and we must remember that good fielding goes a long way in winning matches. Score:—

LONDON "A."

C. G. Wright, b Ticehurst	2
R. N. Byatt, b Ticehurst	16
N. H. Dammere, b Davies	10
J. H. Owens, c Hunot, b Ticehurst	2
A. H. Pollard, not out	45
S. C. Methuen, b Ticehurst	5
W. W. Woods, c & b Ticehurst	0
S. R. Harrison, c Rutter, b Davies	4
S. L. Heard, lbw, b Ticehurst	5
J. G. Watson, c Ticehurst, b Clarke	22
J. Moseley, b Clarke	2
Extras	3
Total	116

GUY'S "A."

W. E. Fox, c Pollard, b Dammere	16
W. Ingram, b Pollard	15
F. C. Hunot, b Watson	13
H. Munden, run out	1
W. T. Clarke, b Woods	38
J. F. Young, run out	12
G. Y. Thompson, b Pollard	2
L. G. Davies, b Pollard	0
C. B. Ticehurst, not out	15
W. S. Rutter, not out	5
Extras	7
Total (8 wickets)	124

W. Kemp did not bat.

Lawn Tennis.

GUY'S v. BRIXTON WANDERERS.

Played at East Dulwich on Saturday, June 16th. We have been most unfortunate this season, having only been able to play one match previous to this, though the team would probably prove strong if we could only get practice. On this occasion we won two events, and then were stopped by a tremendous storm.

Team:—A. Zorab and F. W. M. Palmer, M. M. Earle and H. Chapple, M. M. Adams and A. S. M. Palmer (Capt.).

GUY'S v. KENT.

Played at Honor Oak Park on Saturday, June 23rd. The weather on this occasion was a little more propitious, allowing us to finish the match, which we lost by 2 events to 7. Kent had a very level side, to be defeated by whom is not discreditable. Results:—

A. Zorab and F. W. M. Palmer lost to Colquhoun and Galloway, 5–7, 3–6; lost to the brothers Heelas, 5–7, 3–6; beat Cousins and Dunn, 6–0, 3–6, 7–5. M. Earle and H. Chapple lost to Colquhoun and Galloway, 8–10, 3–6; lost to the brothers Heelas, 8–10, 1–6; beat Cousins and Dunn, 6–2, 2–6, 6–1. F. Cutler and A. S. M. Palmer lost to Cousins and Dunn, 5–7, 4–6; lost to the brothers Heelas, 4–6, 3–6; lost to Colquhoun and Galloway, 6–0, 3–6, 2–6.

INTER-HOSPITAL CUP TIES.

Played at Chiswick Park on June 25th, 26th and 27th. We made a far better show in these events than we have done for years past, beating Bart.'s in the first round, and London in the second round, neither of them weak teams, losing in the final, after a good and fairly even struggle, to St. Thomas's, who thus retain the Cup. Considering the very little play that our men have had, they showed surprisingly good form. Chapple is a bit off his game in singles, but, with Earle, who has come on wonderfully, forms a pair very hard to beat. Zorab at times was excellent, his back-hand drives being delightful to watch. Against Thomas's he made a great bid for winning his single, but was worn down by the superior staying power of Dawes. Earle won his single on all three days, as also did Cutler, who now plays a really good game. The match with London was quite exciting, as we halved the singles, and remained level till the last round of the doubles. London were somewhat handicapped by the fact that Oakley received a slight injury, owing to a collision with his partner.

We offer our heartiest congratulations to the 2nd VI. on their splendid performance. Scores:—

GUY'S v. ST. BARTHOLOMEW'S.

FIRST ROUND.—June 25th.

SINGLES.—Won, 6–0.—Chapple beat P. Black, 6–3, 6–2. Zorab beat R. T. Crawford, 6–1, 10–8. F. W. M. Palmer beat Oulton, 6–0, 7–5. M. Earle beat F. Gordon, 7–5, 6–1. A. S. M. Palmer beat Lewis, 6–3, 6–3. F. Cutler beat J. S. Gibson, 6–1, 6–2.

DOUBLES.—Won 2, lost 2, rest abandoned.—Zorab and F. W. M. Palmer beat Black and Crawford. Chapple and Earle beat Oulton and Gordon, 6–1, 6–2. Cutler and Palmer lost to Oulton and Gordon, 6–4, 3–6, 4–6; lost to Lewis and Gibson, 4–6, 4–6.

Total—Won, 8–2.

GUY'S v. LONDON.

Second Round.—June 26th.

Singles.—Drawn, 3–3.—Chapple lost to Luker, 5–7, 4–6. Zorab beat Vernon, 6–1, 6–4. F. W. M. Palmer lost to Ramsbotham, 6–8, 3–6, 2–6. Earle beat McLean, 6–2, 6–3. A. S. M. Palmer lost to Oakley, 0–6, 2–6. Cutler beat Iles, 6–1, 6–1.

Doubles.—Won, 6–3.—Zorab and F. W. M. Palmer lost to Oakley and Luker, 6–0, 1–6, 6–8; beat Vernon and McLean, 6–8, 6–0, 6–3; beat Ramsbotham and Iles, 6–2, 6–3. Chapple and Earle beat Vernon and McLean, 6–3, 6–1; beat Ramsbotham and Iles, 7–5, 6–2; beat Oakley and Luker, 6–1, 6–0. Palmer and Cutler lost to Ramsbotham and Iles, 1–6, 4–6; beat Oakley and Luker, 6–0, 7–5; lost to Vernon and McLean, 2–6, 4–6.

Result.—Won, 9–6.

GUY'S v. ST. THOMAS'S.

Final.—June 27th.

Singles.—Lost, 2–4.—Zorab lost to Dawes, 8–6, 2–6, 2–6. Chapple lost to Gemmell, 4–6, 5–7. F. W. M. Palmer lost to Hibbert, 5–7, 1–6. Earle beat Howitt, 4–6, 6–2, 6–0. A. S. M. Palmer lost to Rae, 2–6, 0–6. Cutler beat Brandon, 6–4, 6–2.

Doubles.—2–4 (3 abandoned).—Zorab and F. W. M. Palmer lost to Dawes and Gemmell, 1–6, 1–6; beat Hibbert and Brandon, 8–6, 4–6. Chapple and Earle beat Howitt and Rae, 6–2, 7–5; lost to Dawes and Gemmell, 6–4, 3–6, 3–6. Cutler and A. S. M. Palmer lost to Hibbert and Brandon, 5–7, 3–6; lost to Howitt and Rae, 3–6, 0–6. Result.—Lost, 4–8.

JUNIOR INTER-HOSPITAL LAWN TENNIS CUP TIES.

This year six hospitals entered for the above. Guy's, London and St. Thomas's entered their Second VI. teams, while King's, St. Mary's and University College Hospitals entered their First VI.

On Monday, June 25th, the London easily vanquished King's, while Guy's met last year's winners in St. Thomas's. A good match resulted, but Guy's proved too strong for their opponents, and scored four out of the six singles, and five out of the seven doubles played.

On Tuesday St. Mary's beat University in their bye, while Guy's had an exciting match with the London.

The singles resulted in a score of 3 points to each side. Two rounds of the double were played off before lunch, and added a couple more points to the Guy's total, Adams and Barker beating the London first pair after a long struggle, and Greene and Whiteley easily beating their opponents.

In the afternoon Guy's soon obtained the necessary points with the loss of only one double.

The final round against St. Mary's took place on Thursday, and was a hotly-contested match throughout. Greene and Whiteley are to be congratulated on scoring 5 of the 8 points made for Guy's. Adams and Barker spoilt their record for the double by losing to the second pair. St. Mary's looked very much like winning at one period of the game, and the issue remained doubtful almost to the very end, but the last double gave Guy's the necessary points and a victory for the first time in the Junior Cup ties final. Scores are appended as follows:—

GUY'S v. ST. THOMAS'S.

First Round.

Singles.—M. M. Adams (Guy's) lost to O. R. Small, 13–15, 4–6. F. A. Barker (Guy's) beat Walker, 6–8, 6–4, 6–3. R. Davies-Colley (Guy's) lost to R. Leicester, 0–6, 2–6. W. G. Pinching (Guy's) beat Chan, 5–7, 8–6, 6–1. W. F. Whiteley (Guy's) beat J. N. Wheeler, 6–3, 7–5. C. W. Greene (Guy's) beat W. Mathieson, 6–3, 3–6, 6–2.

Doubles.—Adams and Barker beat Smale and Walker, 5–7, 6–3, 6–4; beat Leicester and Chan, 6–0, 6–2; beat Wheeler and Mathieson, 6–3, 6–4 Davies-Colley and Pinching beat Leicester and Chan, 8–6, 2–6, 6–4; beat Wheeler and Mathieson, 6–0, 6–1. Whiteley and Greene lost to Smale and Walker, 6–8, 6–1, 4–6; lost to Wheeler and Mathieson, 3–6, 4–6.

GUY'S v. LONDON.

Semi-Final.

Singles.—Adams lost to Shann, 6–0, 4–6, 3–6. Barker lost to Sharp, 3–6, 3–6. Davies-Colley lost to C. T. Scott, 6–4, 0–6, 6–8. Pinching beat Lloyd, 7–5, 2–6, 6–1. Whiteley beat Carr, 6–3, 6–3. Greene beat Reeves, 6–3, 6–1.

Doubles.—Adams and Barker beat Shann and Sharp, 4–6, 6–1, 10–8; beat Scott and Lloyd, 6–4, 7–5. Davies-Colley and Pinching lost to Scott and Lloyd, 6–2, 3–6, 2–6; beat Carr and Reeves, 6–0, 5–7, 8–6. Whiteley and Greene beat Shann and Sharp, 6–2, 9–7; beat Carr and Reeves, 6–2, 6–3.

GUY'S v. ST. MARY'S.

Final Round.

Singles.—Barker lost to Balthase, 8–6, 5–7, 6–8. Davies-Colley lost to Fawkes, 3–6, 2–6. Pinching lost to Hopkins, 1–6, 7–9. Whiteley beat Goh, 4–6, 9–7, 6–3. Greene beat Drew, 0–6, 6–2, 6–4.

Doubles.—Adams and Barker beat Balthase and Littlejohn, 4–6, 6–4, 6–2; lost to Fawkes and Hopkins, 3–6, 3–6; beat Goh and Drew, 6–2, 6–3. Davies-Colley and Pinching lost to Balthase and Littlejohn; lost to Fawkes and Hopkins, 6–4, 4–6, 3–6; beat Goh and Drew, 1–6, 7–5, 6–4. Whiteley and Greene beat Balthase and Littlejohn, 6–4, 8–6; beat Fawkes and Hopkins, 6–4, 6–4; beat Goh and Drew, 6–3, 6–3.

Guy's Hospital Rifle Association.

The Annual Prize Meeting was held at Runnymede last Tuesday. Those men who shot in the morning were lucky, as after lunch the wind was very tricky, and, after some heavy showers, the light became very bad. We have to thank Sir Alfred Fripp, Dr. Beddard, and Dr. Pembrey for their kind donations to the Prize List.

As will be seen, Classes II. and III. participated largely in the prizes. Results below:—

I. "NEWTON PITT" CHALLENGE CUP.—

Winner—H. J. Henderson, 92. Next best scores—R. E. French, 86; C. B. Ticehurst, 80; J. S. Cooper, 80.

II. HANDICAP COMPETITION.—

H. J. Henderson	...	91 (barred for winning I.)	
R. G. Oram	...	75+8 = 83	15/-
L. Reynolds	...	75+8 = 83	10/-
E. G. Reeve	...	51+32= 83	5/-
R. Mullins	...	51+32= 83	5/-
C. B. Ticehurst	...	80 scr.	
P. Patey	...	68+10= 78	
W. E. Wallis	...	63+12= 75	

III. LONG RANGE.

P. Patey	...	28	15/-
R. E. French	...	25	10/-
C. B. Ticehurst	...	21	5/-

H. J. Henderson, 20; E. G. Reeve, 18; R. G. Oram, 17.

IV. RAPID FIRING.

J. S. Cooper	...	19	15/-
E. G. Reeve	...	18	10/-
L. Reynolds	...	17	5/-

H. J. Henderson, 18; C. Ticehurst, 18; R. French, 18 (barred); R. Mullins, 15; P. Patey, 15; P. Oram, 14; W. Wallis, 13.

V. 600 YARDS:—

R. E. French	...	43	15/-
H. J. Henderson	...	42	10/-
C. B. Ticehurst	...	37	5/-

R. Oram, 36; P. Patey, 30; L. Reynolds, 24; G. Reeve, 23; W. Wallis, 19.

The last shoot for the Armitage Cup took place at the same time. Our team made the same total as at the last shoot:—

H. J. Henderson	92
R. E. French	86
C. B. Ticehurst	80
J. S. Cooper	80
R. G. Oram	76
L. L. C. Reynolds	75

Mary's win the Cup again this year. The totals will be published in our next issue.

Swimming Club.

WATER POLO.

The team has played ten matches, of which five were won, four lost and one drawn. The Inter-Hospital Cup Ties as follows:—

28th June.—First round v. St. Thomas's. Won by 5–3. St. Thomas's scored all their three goals first, and led at half-time by 2–0. Our goals were scored by Rutter (1), Henry (1), and Ball (3).

5th July.—Second round v. Bart.'s. Drawn, 3 all. We had a weakened team owing to the absence of Haycraft. As before, Bart.'s scored their three goals first. Our goals by Rutter (1), Ball (2).

7th July.—Replayed Tie v. Bart.'s. Won by 6–2. At half-time Bart.'s led by 2–1. Rutter was in excellent shooting form in second half. Goals by Rutter (3), Haycraft, Saunders and Ball (1 each).

10th July.—Final against London. Lost by 1–3. We scored first through Henry, and in the second half London scored a lucky goal through Stones. Extra time was played, and Stones and Palmer each scored for London. We were mainly beaten by the excellent goal-keeping of Field, who played a first-class game. Team:—

H. N. Eccles (Capt.), goal; S. McK. Saunders, G. F. Haycraft, backs; W. T. Clarke, half-back; W. S. Rutter, A. M. Henry, M. E. Ball, forwards.

TEAM RACING.

30th June.—v. St. Thomas's, first round. Won by 8 yards. Time, 3 min. $3\frac{2}{5}$ sec.

6th July.—v. Westminster, second round. Our first and second men in lost slightly; Saunders pulled up and deadheated with his man; Price won by a yard. Time, 3 min. 2 sec.

9th July.—Final v. London. Lost by 12 yards. Langdon made a bad start, and lost six or seven yards for us. Rutter also lost several yards. Price gained a yard or two on his man, but stood no chance. Time, 2 min. $51\frac{2}{5}$ sec. Starter: Dr. Morgan Dockerell. Judge: Sir Alfred Fripp. Team on each occasion:—

C. Langdon, W. S. Rutter, S. McK. Saunders, P. S. Price (Capt.).

Births.

COOPER.—On July 2nd, at Fownhope, Surbiton, the wife of Harry Cooper, M.A., M.D., of a son.

EYRE.—On June 7th, at Holmsdale, Wandsworth Common, to Dr. and Mrs Eyre, a son.

HANCOCK.—On June 28th, at Escott, Streatham, the wife of W. Ilbert Hancock, F.R.C.S., of a son.

Marriages.

CROSS—MILLAR.—On July 3rd, at St. Peter's, Eaton Square, by the Rev. Prebendary Storrs, Vicar, Francis George Cross, F.R.C.S., of Kingston-on-Thames, son of Thomas Cross, Beckenham, to Greta, youngest daughter of the late James Millar, of Paisley, and of Mrs. Millar, of Windlesham.

HAMMOND-SMITH—PARAMORE.—On July 4th, at Christ Church, Woburn Square, by the Rev. Prebendary J. J. Glendinning, M.A., Vicar, and the Rev. William Allanson Hick, M.A., Vicar of Dalton (uncle of the bride), Arthur Hammond-Smith, L.D.S. Eng., of Anerley, King's Road, Reading, and 23, Henrietta Street, Cavendish Square, W., to Florence Maud, youngest daughter of Councillor Richard Paramore, M.D., and Mrs. Paramore, of 2, Gordon Square, W.C.

LEEMING—LAMPREY.—On June 28th, at Wandsworth Common, Arnold Leeming, M.B., B.S. Lond., M.R.C.S., L.R.C.P., of Sudbury, Suffolk, elder son of Joseph Leeming, F.R.I.B.A., to Annie Maud, elder daughter of Charles Lamprey, Westwood Tower, Wandsworth Common.

UMNEY—ZEEDERBERG.—On July 12th, at St. John's Church, Auckland Road, Upper Norwood, by the Rev. M. B. Stuart-Fox, assisted by the Rev. Wm. Smyly, M.A., Vicar of Penge, S.E., Reginald Umney, of "Linda," Bournemouth, sixth son of Charles Umney, of "Fernbrake," Bournemouth, late of Sydenham, to Ethel Bernardine, second daughter of Roelof. A. Zeederberg, of Mowbray, Cape Town, South Africa.

Death.

DRYLAND.—On June 24th, at Kettering, John Winter Drylaud, J.P., M.R.C.S., L.S.A., L.M.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

TO the majority of our readers the name of the late Mr. Alfred Beit was well known, but it may be doubted if some of us fully realised our indebtedness to him, both as a Governor of this hospital and as one of its staunchest friends and supporters. Yet during the last ten years of his life Mr. Beit took a cordial, if unostentatious, interest in the work of this Foundation. In 1895, when the Re-endowment Appeal was made, he first manifested his sympathy by a cheerfully-given donation of £5,000. In the following year he was elected a member of the Court of Governors, but could rarely attend its meetings, through want of leisure or business exigencies, and was therefore unable to take so active and personal a share in the work of management as some of his colleagues. He contrived, however, to make up for unavoidable absence from the periodical meetings by fresh generous donations, and by visiting the wards privately when opportunity occurred, thus inspecting the hospital for himself. A keen business man, he could fully appreciate the difficulties which have to be encountered in the work, and the manner in which they were met won his hearty approval. Had he lived longer and found more opportunity, it is probable that he would have identified himself still more closely with the ministration of this hospital than he was able to do during the ten years of his governorship, and, as it is, his last gift—the legacy of £20,000 which comes to us at his death—shows how sincerely he had at heart the interests of Thomas Guy's great Foundation.

NOR was it only by his munificent donations towards the hospital funds, or by occasional visits of inspection, that he showed his interest in our work. From the time when he was elected to the Court of Governors, he proved that, even in small things, he could think of the wants of others. The outside public knows but little of his numerous kindly acts—of the butter that came from his farm "with Mr. Beit's compliments for the wards," and the packets of clothing which found their way to the Matron's Office. To a millionaire they may have been trifles, but Mr. Beit had already shown that he could be generous on a large scale, and these acts of kindliness proved the true gentleness of his nature and his real sympathy for the sick. Through his death, therefore, Guy's loses a warm friend and an ardent supporter, whom, in these hard times, it can ill spare, and for whose generosity

and thoughtfulness in the past it will always be whole-heartedly grateful.

The Garden Fête at Lee has proved an undoubted success, and our best thanks go to those ladies and gentlemen who so generously and energetically helped to make it so. There are several beds in the hospital which owe their existence to such undertakings as these, and it is gratifying in the extreme to find that there is a possibility that one more bed may be endowed by the proceeds of the Lee fair. How widely the undertaking appealed to sympathisers and friends the report which appears elsewhere in this issue shows. There were old friends who had given their services on former occasions amongst the stall holders, and there were new supporters whose co-operation and help we trust will be extended to us again on some future occasion. No effort was spared to make the booths and stalls as attractive and as bright as possible, and the success of the Fête testifies to the appreciation of those who visited it. Where everyone worked so well, and where each helper contributed so largely to the success of the afternoon, it would be manifestly invidious to single out one or more for special praise, and we beg therefore to tender our thanks to both organisers and helpers collectively, and to assure them of our cordial appreciation of their united efforts on behalf of the Hospital.

The letter on "Medical Ethics and Economics" which appears in this issue, opens as wide a field for discussion, almost, as Dr. Haldane's lectures on "Life and Mechanism," and it is to be hoped that some of our older readers, especially those in private practice, will favour the Gazette with their comments onthe subject with which our esteemed correspondent "E." deals. Notes in the tenor of Minnie Oxbridge's must be familiar to most of us. Some of them may be couched in more pathetic, others in a much more impertinent style, but all of them, we venture to think, are interesting, not merely to students of medical ethics, but to students of human nature as well.

Even the staff of this hospital receive weirdly strange epistles at times. Some months ago there came a letter, ostensibly emanating from a poor, half-starved individual, inquiring whether there was any physiological reason why he should not subsist on crows—a letter which appears to have made the round of London hospitals, and to have been taken seriously by one of our hospital contemporaries. More recently a member of the surgical staff has handed us the following communication, which he received from a country correspondent, and which may not be without interest to those who delight in things curious :—

> Sir,—Please accept my apologies for troubling you but I shall esteem it a great favour if you will tell whether it is allowable for anyone to give to a Hospital a written agreement that it shall become possessed of his body after death for the purpose of dissection with a view to *forwarding medical science*, provided that the body shall be returned for burial to the relatives if they wish it, in so long a time, and *what payment would a Hospital give* to anyone for such an agreement. It would be accompanied by a copy of the *will*, or the person would agree to report himself so often to shew that he was still alive. The agreement would be accompanied by a statement of all the illnesses and peculiar pains etc to which the person had been subject during his life, so that the condition of the body would become more interesting to the students.
>
> Your kind reply would be much appreciated by yours obediently,

Observant readers will find much food for speculation in this letter. The somewhat involved phraseology—reminiscent of Dr. Burdon Sanderson at his best—the absence of any attempt at proper punctuation, and the quaintness of one or two expressions, are interesting from a purely literary point of view, while the words in italics are equally interesting as furnishing some clue to the motive that prompted the writer. We therefore print it in full in the hope that those who have received letters of a similar nature, and are disposed to offer them for publication, may be induced to send them on. A collection of curious epistles from the layman to the doctor should make amusing as well as interesting reading.

The vacancy in the Physiological Department, caused through the resignation of Dr. David Forsyth, has been filled by the appointment of Mr. H. C. Cameron as Assistant Demonstrator

of Physiology. We beg to tender our congratulations to Mr. Cameron.

THE opening meeting of the Pupils' Physical Society will be held on October 13th, in the Physiological Theatre, when Professor Clifford Allbutt has promised to read a paper before the society. At the annual dinner, which this year will be held in combination with the Students' Club, it is hoped that Sir Samuel Wilks will be able to take the chair. Professor Allbutt's recognised eminence as a leader in the profession is sufficiently well known to all, and the society is to be congratulated on persuading him to act as lecturer for the evening. Once more we wish to point out that the meetings of the Pupils' Physical Society are open to every student of the Hospital, no matter in what year, and that the Secretaries will cordially welcome any offers to submit specimens of interest for exhibition and discussion. The programme for the coming session has been provisionally fixed, and will be published in full at a later date. The subject for the Treasurer's Prize Essay this year will be the various conditions and forms of pneumococcal suppuration, but the full title will be announced later.

WE have to chronicle several honours which have recently fallen to the lot of old Guy's men. Mr. Henry Morris, whose record at Guy's was a distinguished one, has been elected President of the Royal College of Surgeons for the ensuing year. Mr. Handley, who left us not so very long ago to set up his microscope in Middlesex Hospital, has been appointed Hunterian Professor, and Mr. Kenneth Goadby, whose connection with this Hospital was almost as recent, has been appointed Erasmus Wilson Lecturer to the Royal College for the ensuing collegiate year. These gentlemen are no longer within our gates, but as they are members of our community they are not strangers without, and their success will be keenly appreciated by every Guy's man, who will join with us in congratulating them on their several appointments.

THROUGH the kindness of Mr. and Mrs. Cosmo Bonsor, the Nurses and some of the senior students once more enjoyed a pleasant afternoon's outing at Kingswood Warren. As usual the excursionists were favoured with splendid weather, both on Thursday and Friday. Indeed, Mr. Bonsor must have made a special compact with the clerk of the weather for the benefit of his guests, for, with one exception, his annual garden parties have been held under ideal conditions as regards sunshine. This time proved no exception, and those who visited Kingswood were therefore able to take full advantage of the many outdoor games and recreations provided for their amusement. The switchback and Aunt Sally came in for the major share of attention, and everyone paid her or his tribute of laughter to the quaint figures that floated through the park when the fire balloons were sent up. At the parting gathering round the tables Mr. Wells expressed the thanks of the guests to their kind host and hostess, and Mr. Cosmo Bonsor briefly replied. Auld Lang Syne having been sung, the guests proceeded down to the station where a special train was in waiting to carry them back to Guy's.

JUST as we go to press we have received an account of the Swimming Competition held at the Southwark Baths. All the events were well contested, and among these there was an invitation race for the nurses. The Matron herself was present, and the best thanks of all concerned are due to her for so kindly giving her patronage, and for the great personal interest she displayed in the contests. The prizes, which were much admired, most of them presented by the Staff, were distributed by Lady Fripp, and at the conclusion Sir Alfred, in his own inimitable way, expressed the hope that the Guy's Swimming Competition would become an annual event.

IN accordance with the usual custom, there will be no issue of the GAZETTE on August 11th. The next number will therefore be published on August 25th. Owing to lack of space in the present issue, several communications are unavoidably kept over.

The Council of the Royal College of Surgeons of England has appointed William Sampson Handley Hunterian professor, and Kenneth Weldon Goadby Erasmus Wilson lecturer, for the ensuing collegiate year.

An Eighteenth Century Epidemic of Diphtheria.

To trace the history of a disease is always interesting, and one of the most interesting of diseases, from the historical point of view, is diphtheria. It is difficult for us to realize that until about 50 years ago diphtheria was unknown, or perhaps one should rather say was unrecognised, in this country. It was in 1855 that an epidemic of diphtheria occurred in the Southern counties of England, which, as it was introduced from the North of France, was known as "Boulogne sore throat." Since then this disease has been always with us. But though diphtheria was then first definitely recognised in England, there is no doubt that it had not infrequently occurred before, but had been confounded with scarlet fever and the various forms of tonsillitis, and described with them under a variety of names such as angina maligna, angina gangrenosa, cynanche, squinancy, and many others. The honour of first distinguishing diphtheria from other inflammatory lesions of the fauces belongs to Bretonneau, who in 1820 gave the disease the name it has had ever since, and who also first described it as a "specific disease." Bretonneau, too, was the first to point out the inflammatory nature of the membrane, which previously had been regarded as a gangrene of the normal mucous membrane. Though only fully described so recently, diphtheria appears to have occurred in the earliest times in Syria and Egypt. Thence it gradually spread westward through mid-Europe during the Middle Ages, and at the end of the 16th century epidemics occurred in Italy and in Spain, where it received the expressive name of "Garotillo." From 1745–1780, a number of epidemics occurred in France, and during the 18th century cases undoubtedly occurred in England and Scotland. I have recently obtained a pamphlet entitled "An historical dissertation upon a particular species of gangrenous sore throat which reigned last year among the young children at Paris." It was written by Dr. Chomel, published in Paris in 1749, and translated into English in 1753 by Dr. Torriano, who dedicated it to Dr. Pitcairn, physician to St. Bartholomew's Hospital. The disease described is undoubtedly diphtheria, and it must be one of the first full and correct descriptions of the disease. The author distinguishes it as a definite disease, but though he regards it as a "particular species of gangrenous sore throat," he does not give it a distinctive name, and he regards the characteristic membrane as an eschar of the mucous membrane of the throat. The author modestly disclaims any idea of the disease being a new one, but quotes authors of remote antiquity, who mention a disease of similar nature. He gives a good account of the disease, defining its chief symptoms, its cause, and gives his ideas of its correct treatment. If he had but correctly described the nature of the membrane and given the disease a distinctive name, he would, I think, have to be regarded as the first to definitely identify diphtheria.

Dr. Chomel in all describes eight cases, all undoubtedly diphtheria, three of which recovered, while five died. All the patients were children, the oldest being fifteen and the youngest two and a half years of age. Death occurred in the fatal cases between the eighth and ninth days. The following is an extract from one of the fatal cases:— . . . "On Friday she was greatly stopped up and spoke very much through her nose. On the Saturday her voice was much interrupted, and she rattled (or had rather a whizzing noise) in her breath. She seemed strangled and notwithstanding this, as she swallowed well, they did not yet examine the throat. On Sunday the strangling was accompanied by a suffocation; the fever increasing every moment, they were in the utmost alarm and consternation, and sent in the evening for the House-Physician, who advised a bleeding in the foot. On Monday . . . they then examined the throat and found it full of whitish eschars, which seemed to scale and peel off. She fell into the agonies of death and died on the Tuesday morning. On opening the body the amygdales (tonsils) appeared fretted, gnawed, and scirrhous, the uvula and tracheal artery (trachea) the same, the lungs gangrened and filled with a purulent sanies."

The following extract from the account of a patient who recovered is of interest, as it shows that the author recognised post-diphtheritic paralysis. "I have since learned that this patient, after the fortieth day of the disease, spoke very much through her nose, became squint-eyed and deformed; but that as she grew stronger she also regained day by day her natural state."

After describing in detail the eight cases, the author gives a summary of the disease, in which he says that the earliest symptoms are a sore throat with fever, and that a white spot appears on one of the tonsils within the first twenty-four hours. This extends to the uvula, pharynx, and nose, which frequently bleeds. "The increase of the disease is shown on the third day by a fever, . . . and by a whitish eschar, which, without extending far, thickens, grows crusty, and seems ready to fall off, but yet held by several little pedicles . . . do not separate unless it is to discover new ones hid underneath. The bleeding of the nose continues, the pituitary membrane (nasal mucous membrane) is eaten by the gangrenous ulcer, the voice is changed, the patients are stopped up and seem to want to blow the nose, but discharge nothing but a clear sharp and limpid serosity which runs from the nostrils. The smell becomes insupportable; the tracheal artery is gnawed by the ulcer; respiration becomes painful and interrupted by a whizzing; the lungs ulcerate, which ulceration of these viscera soon draws death after it, sometimes on the fifth, but oftenest the seventh or ninth day."

The most striking omission in this account is that no mention is made of laryngeal obstruction or of the changes which occur in the larynx, though two of the fatal cases described undoubtedly died with laryngeal diphtheria. In most of his cases, however, the nasal fossæ appear to have been involved. This omission is, however, remedied in an account of three cases of the

same disease under the care of M. Astrue, the principal physician to the Faculty of Paris, which were communicated by him to Dr. Chomel. All three cases were undoubtedly diphtheria, and the following extracts from two cases, both of which recovered, show that the extension of the disease to the larynx was recognised.

The patient, a boy æt. 14, had on the second day of his illness "a whitish spot, or rather cinder-coloured, upon the almonds, which seemed to enlarge or extend itself little by little the days following to the side of the pharynx and œsophagus. It was not until the tenth day that the patient began to cough, and in coughing he brought up several pieces of skin or gangrenous membranes, which loosened themselves from the pharynx or larynx. These skins or jags of membranes were plaistered over with a little pus; and I was convinced that it was some degree of exfoliation which was made of the interior membrane of the pharynx and the exterior part of the larynx; and that the cough which the patient had, and which was now ceased, was excited by the tickling that those loosened pieces of skinny membranes had made upon the larynx."

Again, in the second case, a boy æt. 12, we read:— "The malady increased day by day, the fever fits were much greater, and they began to terminate by a little sweat. His cough was very troublesome and very dry, his voice hoarse and hardly to be heard, nor was his respiration made without some degree of wheezing, which made me apprehend that the disorder had taken hold of the larynx and part of the tracheal artery. Besides, the almond was swelled and covered with a crust or skin, grey and gangrenous, which extended towards the larynx . . . ."

The author then proceeds to discuss the cause of the disease, which he chiefly attributes to "bad qualities" of the air. He points out that the summer of 1748 was long and hot, and that the autumn was hot and moist, "which had disposed the transpirative matter for putridity." At the commencement of October the weather changed and became dry and cold, with foggy mornings. The first of the cases Dr. Chomel records was taken ill on October 12th, just after the cold foggy weather had commenced. It is also mentioned that the river Seine was very low up to the end of December, and that owing to the weakness of the current the water became contaminated with filth, "and the water in consequence must be altered and in a great measure lose its ordinary good qualities."

He also remarks that a similar disease raged among cattle, but he gives no details and makes no suggestion that the disease might be transmitted by milk, though we are told that meat from animals who died of this disease was eaten without any bad result. This is a surprisingly good account of the ætiology of diphtheria for one who had not the advantage of a knowledge of bacteriology.

A long chapter is then devoted to the treatment of the disease. The author recommends alternate bleeding and the administration of emetics, either tartar emetic or ipecacuanha being suggested. The drug on which he places most reliance internally is "camphire," which he also suggests may be used as a gargle. Cupping glasses and blistering are also recommended.

He discusses the desirability of applying the actual cautery to the "ulcers," but on the whole decides that this is not desirable, "for nature left to herself is sufficient to separate the mortified from the living parts, that all which art can do is to give sufficient activity to the humours and a sufficient expulsive force wherewith to expel the gangrened crusts or scabs. That we ought to leave those which adhere strongly, lest by making a fresh wound the corruption should be easily and readily carried back into the blood and the gangrenous matter repumped back through the mouths of the newly-abraded vessels."

With regard to prophylactic treatment, he quotes an author (Alaymus) who suggests "making cauteries or issues in the arms of children who were not yet struck with the disease to make a favourable deposit of the matter outwardly and preventing the disease by determining the humours this way."

It is difficult to avoid a smile at this treatment, especially at the expense of the house-physician in the first extract, who suggested the "bleeding at the foot," but one cannot but admire the principles on which the treatment is based which, in the words of Dr. Chomel, are, "Firstly, to stop the progress of the putrefaction. Secondly, to destroy that which shows itself, and, Thirdly, to support nature so as to enable her to resist it and defend herself from its further inroads."

No better example of the confusion existing between diphtheria and other diseases could be given than is afforded by Dr. Torriano, who after translating this excellent account of the disease, quotes two similar cases that he had seen and treated himself. One of these was a quinsy and the other apparently an ordinary tonsilitis.

After reading such a book as this—and the extracts which I have quoted are typical of the whole work—we cannot help admiring the careful clinical observations and sound deductions of the writer, especially when we remember that he was without the benefit of modern instruments and methods, and had only very vague and confusing opinions of previous writers to help him. Indeed, the lesson we may learn from this old dissertation, as well as from the writings of many an old physician and surgeon, is the importance of accurate clinical observation, which is as important now as ever it was to the practical medical man.

To conclude with another quotation from Dr. Chomel. "In all Arts, and more especially in Physic, there is a method of practice which is imperfectly learned from books or taught by bare precepts; a practice which proceeds from a clear insight into things and is not acquired by only studying the history of diseases, but also by observation and a natural and peculiar bent or disposition."

PHILIP TURNER.

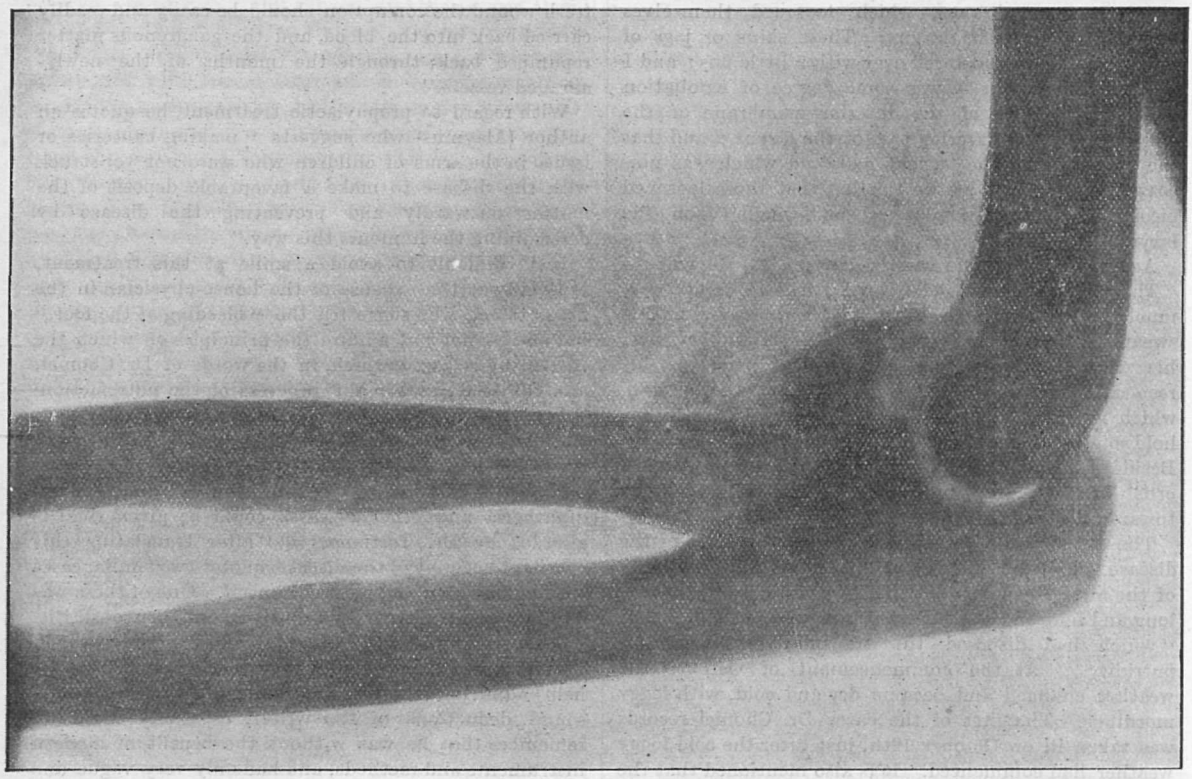
Fracture of the Coronoid Process of the Ulna.

In backward dislocation of both bones of the forearm, it is usual to find, in perhaps 50 per cent. of cases, some damage to the coronoid process of the ulna. This is due to two causes, viz.:—the weakness of this process compared with the force it has to resist, and the firm attachment of the brachialis anticus tendon, which is instrumental in tearing off this small piece of bone.

round these two structures. This creates a mass resembling in many ways a foreign body, preventing flexion and being easily palpable in front of the elbow joint. It may be a means of connecting the muscle with the shaft of the ulna, or it may be completely detached at its ulna end and the function of the brachialis anticus interfered with.

The accompanying skiagram is of a backward dislocation replaced some weeks ago, but now showing the callus formation which is limiting flexion.

One has seen many such cases in this department, but, before recognising the condition, much confusion



Elasticity of the ligaments and other causes occasionally assist the coronoid in resisting the pull of the brachialis anticus, and the push of the lower end of the humerus and a complete dislocation takes place without fracture. These do well if replaced within a reasonable time and if passive movements are resorted to early. In the cases, however, of fracture of the coronoid process the recovery is not so rapid or complete. It is manifest that this process, resisting dislocation as powerfully as it does, must lead to mechanical weakness of the joint when broken off, and that, although reduction is usually easy, it is not always possible to keep the bones in position. This trouble, however, is not the worst that has to be faced. In breaking off it is common for the coronoid to strip a piece of periosteum from the shaft of the ulna, and in a short time a mass of callus is formed

existed. In one patient a curious hard object was noticed in the tissues anterior to the elbow joint, and there was some speculation as to its nature. The rays showed what appeared to be a fragment of bone, and it was suggested that this had in some manner been torn from the humerus. There was a history of backward dislocation of both bones of the forearm some years previously.

There is no very obvious moral, for the condition is not one that can be easily prevented.

From the point of view of prognosis, however, the X-rays should be employed after reduction of the dislocation to ascertain whether the coronoid process is intact, and if separated there is more possibility of getting apposition of the fragments by manipulation if rays are employed during the process.

Some Pathological Specimens with Interesting Clinical Histories.

Demonstration in the Gordon Museum, by Dr. FAWCETT, May 26th, 1906.

CASE 1.—*Carcinoma of gall-bladder, infective cholangitis.*—Emily N., æt. 50, was admitted into Clinical in 1905, under my care, with very intense jaundice. With the exception of what the patient described as a "bilious attack" two months previously, she had had no illnesses, although she thought that she had been losing weight for two months. Three weeks before admission she was seized with diarrhœa, and ten days later the jaundice appeared, and rapidly became of a very deep yellow tint. The main features of her case were, (1) emaciation; (2) the liver dulness was increased upwards to the level of the third rib, while the edge was not palpable; (3) complete obstruction to the biliary outflow, as evidenced by the intense jaundice, the clay-coloured fæces, and bile in the urine. All the other organs appeared to be healthy. For seven days the temperature ranged between 99° and 103°, the jaundice increased in intensity, and the patient became gradually weaker and died about a fortnight from the date of entering the hospital.

Remarks.—The intense jaundice indicated complete obstruction to the biliary flow into the intestines. After consideration of a number of conditions we came to the conclusion that we had to deal either with an impacted gall-stone and secondary ascending infection of the bile ducts, or with malignant disease of the gall-bladder. The smooth regular enlargement of the liver in the upward direction and the pyrexia seemed in favour of the calculous origin of the condition, although the absence of pain is unusual. However, we know from the teaching of Naunyn and others that chronic jaundice from gall-stones may arise without pain, although it is a rare event. Another striking feature of the case was the marked and rapid emaciation. Was the condition, after all, due to malignant disease? I would say this, that the absence of pain and the presence of wasting are certainly not common accompaniments of gall-stones, but that an impacted gall-stone may be associated with great wasting. I can remember performing an autopsy upon a patient where the diagnosis, made with no uncertain voice, was "cancer," and yet at the post-mortem examination there was no malignant growth, but a stone firmly impacted in the common bile duct and an ascending suppurative cholangitis. The instance I have just related to you will make you realise how difficult it sometimes is to distinguish between gall-stones and cancer. We felt considerable doubt about the diagnosis in our case; however, the short history and the sudden onset decided us in sending a request to the surgeon to perform an exploratory operation, to which he declined to accede, and although I thought wrongly at the time, yet the result of the autopsy justified his decision. If you look at this specimen you will see that the gall-bladder is infiltrated by cancerous deposit which partially obstructs the cystic and common duct, the occlusion being rendered complete by thick gelatinous pus which occupies the ducts throughout their course in the liver. No gall-stone was present.

Therefore we can now see that the apparent sudden onset of the illness, five weeks before death, was due to a secondary bacterial infection, which gave rise to an acute ascending suppurative cholangitis which completely obstructed the ducts, and hence the intense jaundice, the pyrexia and the regular enlargement of the liver. One of the most important points that I wish to impress upon you in reference to this case is the necessity of remembering the possibility of a bacterial infection supervening in any case of disease of the bile-ducts or bile-reservoir, and that you must not be misled, by the presence of pyrexia, into thinking that you have only to deal with some inflammatory condition of the liver. The other point is that unless you have definite evidence that the disease, in a case such as this one was, is due to cancer, as, for instance, the presence of secondary deposits in the liver or glands, you should consider the advisability of an exploratory operation, for the condition might have been due to a calculus with an ascending cholangitis, in which event drainage of the biliary channels might have brought relief to the patient.

CASE 2.—*Appendicitis; suppurative pylephlebitis.*—Henry C., æt. 26, was admitted under my care in 1900 for abdominal pain and vomiting, the symptoms having commenced five days previously. On admission, the patient was found to be suffering from acute general peritonitis probably of "appendicular" origin. Mr. Fagge opened the abdomen a few hours later, and found an abscess in the right iliac fossa. For six days the patient progressed satisfactorily; he then had, at intervals, attacks

of severe diarrhœa. The pulse remained rapid throughout, and the patient died in a septic condition eighteen days after admission. He had no jaundice, rigors, nor tenderness or enlargement of the liver, nor could we find any fresh evidence of disease in any part of the body.

Remarks.—The main features of the case were: (1) The acute peritonitis, due to ulceration of the appendix. (2) That, although the patient's progress was satisfactory for a week after the operation, yet he then began to gradually go downhill, and died. The local abdominal condition appeared to be proceeding favourably, and yet his general condition indicated that he was suffering from septicæmia, the source of which we quite failed to locate. At the post-mortem examination the diagnosis of septic infection was confirmed, and was found to be the result of suppuration in the portal vein and its branches throughout the liver. There were multiple abscesses in the liver, and also evidence of a general pyæmia, as shown by small abscesses in the lungs, and a softening ante-mortem thrombus in the inferior vena cava. You can see the lesions in the liver as well as in the portal vein and the inferior cava, and once again you will have impressed upon you the frequency with which suppurative pylephlebitis is only discovered when the autopsy is made. This condition is often most insidious in its onset and obscure in its symptoms. About 40 per cent. of the cases follow appendicitis, and in many of them the symptoms have been, as in this case, rather of a general character than pointing to infection of the portal area and the liver. In a large proportion of the cases the liver can be felt to be enlarged, but where peritonitis already exists this is often impossible, and the absence of jaundice, as in the patient we have been referring to, renders the diagnosis still more difficult. The patients are very ill, they appear anxious, and are often slightly jaundiced; they are restless, and may suffer from rigors, vomiting and diarrhœa. If there is also rigidity and tenderness, with enlargement of the hepatic area of dulness, do not forget suppurative pylephlebitis. This condition may arise from inflammation and ulceration of any of the areas drained by the portal vein, among which the intestines, the gall-bladder, and the stomach are to be specially remembered.

Case 3.—*Cerebral tumour, double hemiparesis, with rigidity.*—Mary W., æt. 62, was admitted in 1904, under Dr. Pitt, with loss of power on the left side of the body. Six weeks before admission she had fallen down suddenly and become unconscious. She afterwards suffered with severe headache, whereas previously she was stated to have had no symptoms whatever. On admission, she was drowsy, slow in speech, and there was a partial left hemiplegia with a varying amount of rigidity on the same side. She had incontinence of urine. At times she seemed intelligent; at others she took little notice when spoken to. A month later the right arm was found to be rigid, double optic neuritis was present, and after this date the patient remained, until her death, in a more or less semi-comatose condition, with the arms and legs rigid. As you can see from the specimen, the right cerebral hemisphere is occupied by a large spherical tumour in the white substance, extending from the frontal region backwards to the posterior limit of the lenticular nucleus, and involving the internal capsule. It spreads over towards the left side so as to exert pressure upon the basal ganglia and motor tract, although it does not directly invade them.

Remarks.—A cerebral lesion, probably a tumour, was thought to be the cause of the symptoms; of this the headache, the mental deterioration, the progressive motor paralysis and optic neuritis, left little doubt. What is the explanation of the sudden onset of hemiplegic weakness? In some it may be due to associated or independent valvular disease; in others to occlusion of vessels by the growth; in others, again, by hæmorrhage into the growth, as in a soft glioma. On the other hand, a sudden onset may occur without any apparent explanation. A point of interest in this case was the sudden onset of paralytic symptoms which is usually preceded by others of a general type, such as severe headache; in this case we could get no history of anything of the kind.

Case 4.—*Ruptured intracranial aneurysm.*—Ellen Y., æt. 26, was admitted under my care in January, 1905, for severe headache and right-sided hemiplegia. Six days previously she had been found unconscious, and on recovery hemiplegia and aphasia were present. The next day she had to a great extent recovered the use of her limbs. On admission, headache, vertigo, vomiting, and early optic neuritis were present; the pulse was slow—54 per minute—the patient was somnolent, and exhibited some weakness of the right side. Two days later the hemiplegia reappeared, and again showed some improvement. Ten days from this date the patient developed a series of convulsive attacks and died. The diagnosis was hæmorrhage into a cerebral tumour, but at the autopsy, as you

can see from the specimen, it proved to be a saccular aneurysm of the internal carotid artery, just at its point of bifurcation, which had ruptured into the lateral ventricle.

Remarks.—These cases, except in association with infective endocarditis or syphilis, are very rare; on the other hand, a few have been recorded in young people in whom no vascular lesion has been found, of which the present case is an example. There are two similar specimens in our museum (Nos. 2684 and 2685 in catalogue), both of which have been placed on record by Dr. Hale White. As is pointed out by Gowers, embolism is probably the most common cause in the first half of life, and when there is no history of syphilis or of injury, evidence of past or present heart disease is seldom absent. As to the symptoms, in some cases as in the one referred to to-day, there may be none until final rupture occurs, although headache is generally present. Optic neuritis is not common, except in aneurysm of the internal carotid, when it is found on both sides. There may be other symptoms either of the general type, such as giddiness and headache, or local signs indicating pressure on nerves or nerve tracts.

Case 5. — *Mediastinal tumour invading the lung.*—A woman, æt. 62, was seen by me in September, 1905. A year previously she had had an attack of membranous colitis, and again in the spring of 1905. The history of her present illness was that for about three weeks she had been wasting and becoming more and more dyspnœic. She was a very thin, spare woman, and presented well-developed clubbing of the fingers and toes. The doctor told me that the physical signs in the chest were of recent development, as nothing of the kind was present when he attended her in the spring. There was neither expectoration nor cough, but the patient was dyspnœic even when lying in bed. On examination, extensive signs of consolidation were found to be present over the whole of the right lung, and at the base evidence of cavitation; in addition there was deficient air entry into the lower lobe. There was no rise of temperature. The patient died two months from the time at which she first complained of any symptoms.

Remarks. — The diagnosis appeared to lie between a mediastinal growth and tuberculous disease of the lung. We were not able to obtain any sputum, and although the clubbed fingers and toes suggested that the condition had existed for a considerable length of time, yet there was the definite evidence of the doctor that this "clubbing" was *not* present three or four months previously. The evidence of pressure on the bronchus, as indicated by the deficient air entry, and also exploration with a needle which showed the absence of pleuritic effusion, pointed to a mediastinal tumour of some sort. We thought that the diagnosis of mediastinal tumour was confirmed by finding an enlargement of the liver, but the autopsy showed that the liver was normal in size and contained no secondary deposits.

You can see in the specimen that the lung is very much enlarged by infiltration with a white growth which maintains the normal outline of the organ. The upper part is solid throughout, while in the lower portion the growth has softened and given rise to a cavity about the size of an orange, to which no doubt were due the physical signs detected over that area. The mediastinal glands are enlarged by growth and the bronchus is compressed.

Two special features of interest are the (1) short history and the apparent sudden onset of the illness, and (2) the very marked "clubbing" of the fingers and toes. The apparent sudden onset is an example of a feature that is met with frequently in malignant disease in various parts of the body; that is to say, that the condition does not give rise to any symptoms for a considerable period after its commencement, as witness cases of cancer of the intestine, of which the first noticeable result is an acute intestinal obstruction; or a large cancer of the stomach, such as No. 695 in our Museum, which was not associated with any gastric symptoms. The extensive area of the lung involved in the disease, as evidenced by the physical signs present, afforded almost certain proof that the condition had lasted for more than three weeks during which the patient had complained of symptoms; the "clubbing" of the fingers which, as far as I know, is very rare in such cases, certainly suggested that the lesion, whatever it was, was of a chronic nature.

Case 6.—*Syphilitic ulceration and stenosis of the larynx, trachea and bronchi.*—Walter R., æt. 39, a much emaciated man, was admitted under Dr. Hale White for dyspnœa and stridor; he gave a history of having suffered with sore throat and cough for two years, and from hæmoptysis a year ago. He was aphonic, and his larynx was found to present marked cicatricial changes. He died two days later from cardiac failure and increasing dyspnœa. The specimen shows you the very great deformity of the larynx and trachea which may take place in syphilitic cases, the whole of the

windpipe being thickened and irregular from fibrous infiltration and scarring. There is a stricture of the right bronchus, with narrowing of its lumen throughout, and the tubes in the lungs are dilated. Scars of old gummata were found in the liver.

Remarks.—The specimen and the history of the case are interesting as drawing your attention to a condition which may be the cause of chronic pulmonary disease. Do we recognise syphilis in this connection, especially when, in a long-standing case, we cannot find tubercle bacilli in the sputum? In this case the inspection of the larynx rendered the diagnosis certain, but there are others where the changes produced are, for the most part, confined to the lungs; for example, specimen No. 252 in our museum was taken from a patient who suffered with winter cough for many years; and in specimen 204 the history gives us a record of eighteen years' cough; there were no laryngeal symptoms in either of these cases. The recognition of syphilis as a causative factor in chronic cases is not merely of diagnostic interest, but one of great importance in reference to treatment, and it is for this reason that I have brought this specimen to show you to-day. The characteristic feature of tertiary syphilitic lesions of the larynx and bronchi is the thickening and induration of their walls, so well seen in this specimen, extending into the intra-pulmonary divisions of the tubes. The condition is a somewhat rare one, and when the larynx is involved, the evidence of old ulceration is usually well marked.

CASE 7.—*Aneurysm rupturing into the œsophagus and bronchus.*—John G., æt. 53, was admitted under Sir Cooper Perry, in November, 1903, for a "gripping pain over the heart." After ten weeks' treatment in the hospital, he was discharged "feeling a new man." In August, 1904, the pain returned, became continuous, and was made worse when the patient lifted his arm above his head. Three weeks before re-admission he had to give up work altogether. The patient was considerably wasted, and he complained of very severe pain in the pericardial region. The pulses were unequal, and the upper part of the left side of the chest in front was somewhat more prominent than the right. About twelve days later he suddenly brought up a large quantity of blood, which was repeated on the following day, and led to the patient's death. which, as you can tell from the history, was almost certainly the result of a ruptured aortic aneurysm. The specimen shows you how extremely atheromatous the aorta is; and you can also see a sacculated aneurysm arising from the descending portion, which has eroded the bodies of some of the dorsal vertebræ. The red rods mark the openings by means of which the aneurysm communicates with the œsophagus and with the left bronchus.

Remarks.—In connection with this specimen, the feature I wish to particularly draw your attention to is that in 1903 no physical signs were found to account for the pain of which the patient complained. Now, in a middle-aged person who complains of more or less constant pain in the chest, often of a severe type, do not forget thoracic aneurysm as a possible cause. Such cases are sometimes put down to "indigestion," or labelled "pleurodynia," or "intercostal neuralgia," *i.e.*, our ignorance of the cause of the pain is whitewashed over, and, what is worse, instead of saying to ourselves that we don't know what is the cause of the pain, and consequently keeping an open mind, we are satisfied with the name we have given it, and call that name *a diagnosis!* I say to you, avoid such names like poison. A skiagram may give useful information, even though there be no physical signs indicative of compression of mediastinal structures. The signs that you should be on the look out for are those of a brassy cough, pointing to pressure on the recurrent laryngeal nerve, and alteration in the pupils or the pulses, or, it may be, a very little difference between the physical signs on one side of the chest and the other.

CASE 8.—*Embolism of the abdominal aorta.*—Emma H., æt. 40, was admitted in 1903 under, Sir Cooper Perry, for abdominal pain and collapse, of sudden onset, which had commenced about twenty-four hours previously. These symptoms were succeeded by vomiting and abdominal distension, and when admitted the patient was much collapsed and complained of great pain in the abdomen. The pulse was 130, and extremely irregular. Shortly after admission the patient complained of severe pain in her left leg; later all the pain disappeared, and the abdomen became flaccid. The patient never rallied from her collapsed condition, and succumbed about twenty-four hours from the time of entering the hospital. The urine contained 1·25 parts per 1,000 of albumen, and granular casts were present.

In the specimen which I show you, you see that for about 3·5 centimetres above the bifurcation of the aorta the vessel is completely blocked by an adherent cylindrical mass of blood clot continuous at its distal extremity with more recent

thrombus which extends down into the iliac and femoral arteries on each side. The left renal artery is also occluded by clot. The heart exhibits an extreme stenosis of the mitral orifice, and the left auricular appendix is distended with an ante-mortem thrombus, which protrudes out into the cavity of the auricle.

Remarks.—I do not know that a diagnosis was ever made, but I have brought the specimen before you as an example of a very rare condition which may give rise to severe abdominal symptoms, simulating more common conditions such as a "perforation" or an intestinal obstruction. I showed you, on the last occasion, specimens of an acute pneumococcal peritonitis, and of an acute pancreatitis, as illustrative of somewhat rare causes of acute "abdominal" attacks; the present specimen is a rarer cause still. Despite its rarity, however, the symptoms may be said to form a well-marked group, the most prominent among them being pains in the legs, loins and the abdomen, a sudden paraplegia of the flaccid variety, and, as the most important diagnostic symptom of all, absence of pulsation in the femoral arteries, with cold livid extremities in which gangrene may develop, should the patient live. Tympanites, diarrhœa, and albuminuria are all common symptoms.

It is important to remember that mitral stenosis is present in a considerable proportion of these cases. Therefore, if this cardiac lesion be discovered in a patient who presents an acute abdominal condition, I hope the association would serve to recall this specimen to your mind, and so lead you to make further investigation, such as the determination of the presence, or absence, of femoral pulsation.

I suppose the most likely explanation of the pathology of these cases is that there is primarily an embolism of the aorta with a secondary thrombosis completing the occlusion of the vessel: it is inconceivable that the mass of clot which we see in the abdominal aorta could have come through the very narrow mitral orifice, and so have completely blocked the main arterial trunk, but one can conceive that a portion of clot from the auricular appendix could pass through, becoming lodged at the point of bifurcation of the vessel, and that a secondary thrombus forming would lead to the condition which you see in the specimen.

CASE 9.—*Duodenal ulcer, dilated stomach, fatal hæmatemesis.*—Thomas C., æt. 62, was admitted under Sir Cooper Perry for abdominal pain and vomiting, from which he had suffered for twelve months; the vomiting had become much more frequent in the last three weeks. On admission, the patient was much wasted, but, apart from a dilatation of the stomach, no evidence of organic disease was found. One day, shortly after admission, the patient sat up in bed, cried out that his head was swimming, fell back and became unconscious; on recovery he was drowsy. Three days later he vomited about three pints of dark blood, and died. The stomach is very much dilated, and, as you can see, the cause is a cicatricial stenosis from an ulcer in the first part of the duodenum. In the floor of that ulcer is visible the vessel which ruptured and led to the fatal hæmatemesis.

Remarks.—The chief points to draw your attention to are that here was a man of 62 years of age who had complained of "gastric" symptoms for a year only, who was found to have a much dilated stomach, and who died of hæmatemesis. The history, apart from the extreme hæmatemesis, was suggestive of "malignant disease," and although fatal hæmatemesis from cancerous ulceration is not unknown, yet it is rare; and for this reason a simple ulcer of the stomach was thought to be the more likely source of the bleeding, more so than the duodenum, as there was no melæna. On looking at the specimen it appears extremely improbable that the condition had only existed for twelve months. The ulcer was almost certainly of much greater age, and it is this feature of "latency" in duodenal ulcerations that I want to remind you of.

In 151 of the cases recorded in the Guy's Reports by Drs. Perry and Shaw, 91 showed no symptoms antecedent to death, or until the sudden onset of hæmorrhage or perforation which led to the fatal issue. In several of the cases, hæmorrhage, sufficiently severe to cause death, was not even suspected until the autopsy showed that the stomach and intestines were full of blood. A sudden intestinal hæmorrhage, especially if severe enough to produce marked anæmia in a person previously healthy, is almost always, in the absence of signs of disease elsewhere, derived from an ulcer of the duodenum. Hæmatemesis may precede the fatal attack in these cases for many years, as also may melæna.

CASE 10.—*Dilated stomach from duodenal ulcer; tetany.*—Emeline H., æt. 53, was admitted under Dr. Taylor for tetany and a dilated stomach. She had suffered from dyspepsia for *many* years; the tetany spasms had commenced a few days before the patient was admitted into the hospital. Treatment was of little avail; the spasms soon became continuous, and the patient died quite suddenly within two

days of entering the hospital. The stomach is, as you can see, enormously dilated, a sequence to obstruction in the first part of the duodenum by a cicatrised ulcer.

Remarks. — The condition I wish to draw your attention to here is neither the ulcer, nor the dilatation of the stomach, but the supervention of tetany, which is so frequently associated with some affection of the alimentary tract, in this case a dilated stomach. You will have noticed that this patient was a woman of fifty-three years of age. Now when tetany takes place in "grown-up" people its incidence is chiefly upon females, in contradistinction to the early periods of life, when males are more frequently attacked by it. Those of you who are interested in the subject may care to read a clinical lecture in our GAZETTE for July 7th, 1900, where abstracts are given of the histories of several patients who had been in the hospital, the particular patient who formed the basis of that lecture having been a woman of thirty-nine years of age who had a dilated stomach, and who had suffered from indigestion for four or five years.

Although tetany is somewhat alarming in its symptoms yet it is only rarely a fatal disease, except in the cases in which it is associated with a dilated stomach, when for some reason a fatal result much more often ensues; indeed, the prognosis when tetany is associated with a dilated stomach is most unfavourable.

CASE 11.—*Carcinoma of the cardiac end of the stomach.*—Emma B., æt. 55, was admitted in 1904, under Mr. Symonds, for gastric pain, vomiting, and difficulty in swallowing: the last symptom had appeared only a few weeks previously. By means of a bougie passed along the œsophagus, an obstruction was found at a distance of fourteen and three-quarter inches from the teeth. The diagnosis was that of a malignant stricture of the gullet. An œsophageal tube was inserted, but despite this, the patient continued to vomit, and died a short time later.

Remarks.—The specimen shows an extensive growth of the cardiac orifice and cardiac region of the stomach, extending also into the lower end of the œsophagus. I have brought the specimen before you, because I want you, when you meet with a case in which the symptoms are partly "gastric" and partly "œsophageal," and where the bougie shows that the obstruction is situated low down in the gullet, to remember the possibility of the lesion being primarily one of the stomach with secondary involvement of the œsophagus. The symptoms may help you, for the "gastric" ones may, as in this particular case, distinctly precede the "œsophageal." In cancer of the cardiac orifice of the stomach, the gullet is often invaded by the growth, and in a considerable proportion of these cases dysphagia is present. The importance of it is mainly from the point of prognosis, because there is much less chance of relieving this condition by treatment than a growth limited to the œsophagus. An œsophageal tube, if inserted for the purpose of feeding the patient, may very possibly act as an irritant in cases in which the stomach is involved, whereas in the œsophageal cases pure and simple, it is comparatively seldom that a tube cannot be worn.

Appointments.

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants in the Medical Wards.—Messrs. L. Croft (Dr. Taylor); P. P. Laidlaw (Dr. Hale White); F. A. Barker (Dr. Pitt); B. K. Nutman (Sir Cooper Perry).

Clinical Assistants in the Surgical Wards.—Messrs. R. Evans (Mr. Golding-Bird); J. S. Farnfield (Mr. Symonds); A. W. Eyles (Mr. Lane).

Ophthalmic Dressers.—Messrs. G. F. E. Allison, J. W. Featherstone (August 1st, Mr. Eason); W. W. Cook (August 1st, Mr. Ormond).

Surgeons' Dressers.—Messrs. E. Abdy Collins, J. H. Ryffel, C. E. Price, M. A. Rahman (Mr. Golding-Bird); S. H. Cummings Air, B. H. Palmer, W. G. Pinching, F. Holcombe Fuller (Mr. Symonds); J. B. Martin, M. K. Nelson, P. J. Kolaporewalla (Mr. Lane); C. D. Roberts, L. L. C. Reynolds, A. F. W. Denning, H. E. Perkins (Mr. Dunn).

Obstetric Dressers.—Messrs. J. T. Smalley, S. Kingsley Poole (Dr. Horrocks); H. F. Joynt, E. P. H. Joynt (Mr. Targett) September–October.

Student Demonstrator of Operative Surgery.—Mr. F. W. Morton Palmer.

Pathological Assistants to the Surgical Registrar.—Messrs. E. Wragg and W. H. Miller.

An Old Conviction, reshaped after reading "The Rubaiyat."

One seeks to read the riddle in the skies,
One into his own imagination pries;
I hold not with this searching of the universe or self—
More wisdom in a little folly lies.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Problems in Medical Ethics and Economics.

DEAR MR. EDITOR,—It has often lately been proposed that courses of lectures on Medical Ethics should be given in the medical schools. It occurs to me that if some old Guy's men would write a short "commentary" on the enclosed letter, and you were to publish a selection from such commentaries, you would give your readers valuable instruction in Medical Ethics, and might possibly encourage others of your readers to submit to the same criticism real or imaginary problems for solution.—I am, yours truly, E.

[ENCLOSURE.]

MY DEAR DR. ——.—Knowing well your extreme kindness to all who are in trouble, I venture to ask you to help a poor man in whom I am interested. One of our under-gardeners has been very ill lately. He is laid up in bed at his father's house. I expect you know it; it is Thomson's, the baker's, in the High Street. His mother was here last night, and tells me that Mr. Smith, their own doctor, is looking after the man, and doesn't seem to be quite sure how long he will be ill. This is, of course, very troublesome to us, as we do not know what arrangements to make for his work. I told the mother I was sure if I asked you that you would be so kind as to see the patient with Mr. Smith without making any charge, but she thinks Mr. Smith might be offended; so I said I would ask you to look in when next you are passing, and see what really is the matter. No doubt if you think it is likely to be a long case, you can persuade the friends to let you take him into the hospital. Then when next you are over here to see Reggie's tennis elbow, you will be able to tell me what exactly is the matter with the gardener, and what I had better do about keeping him on. What would the poor do if it were not for the kindness you doctors always show them?—Yours most truly, MINNIE OXBRIDGE.

P.S.—Sir Thomas Oxbridge asks me to say that when he was in town yesterday he went to see Sir Joseph Boot in Harley Street, about the attack of gout for which he consulted you last week. Sir Joseph was kindness itself, and gave my husband prescriptions for all sorts of remedies, and has promised to see him again next week. Some of Reggie's friends want him to go up to town to be near a very clever Swede, who cures them when they strain themselves at athletics. I am thinking of trying Christian Science for my hay fever.

From the Gazette's Special Pathologist.

G. M. J., ALTON, HANTS.—A preparation of this sputum shows a fair number of Tubercle Bacilli.

PATHOLOGIST.

Disillusion.

Drop a tear, Muses Nine,
For the sad and sudden sinking
That has fallen on my brain,
For it's absolutely plain
Man will know our like again—
That's a fact it's useless blinking!
Every height where we soar
Has been occupied before,
Each emotion we delight in, every word we proudly speak,
Has been thought of—will be thought of—we believed it was unique.

Surely Fate is most condign!
For we thought with jubilation
(Which was very crude and blind)
When our studies we'd resigned
We were sure to leave behind
An undying reputation.
Will exams. we have passed
Leave the Hospital aghast?
Not a trifle, for next year there'll be Another to discuss
Whose mentality will then efface the memory of us.

And, alas! this thought of mine
Is no new, sublime reflection.
Mediocrities of yore
Must have known it by the score
This same fact that I deplore
With a saddened recollection!
For it shows, woeful ruth!
Just the same immortal truth—
We are none of us important, or original, or great,
Just the same unhappy theorem I set out to demonstrate.

S. S.

Relative Frequency of "Liver" Disease.

		1900	1901	1902	1903	1904
Medical in-patients, Guy's		2066	2255	2176	2351	2658
LIVER.	Perihepatitis	2	3	6	16	2
	Cirrhosis	29	35	34	43	42
	Abscess (single and multiple)	2	7	6	7	5
	Malignant disease ...	18	16	29	18	9
	Other diseases	7	9	14	12	11
Jaundice any cause ...		39	32	38	36	30

Among these there was only one case of acute yellow atrophy.

H. F. B. W.

A Note on the Treatment of Lupus.

One hears very little in these days concerning the treatment of lupus, excepting that by the Finsen light. There are a good many cases disseminated throughout the British Isles, of which only a very minor number can hope to go to London and enjoy the privilege of having the light treatment applied to their cases. It may not be wanting in interest, therefore, were I to call attention to a method of treatment of Lupus Vulgaris which was published in the *Lancet* some eleven years ago by Dr. Byrom Bramwell. I have seen very little

Fig. 1.

published in reference to this method of treatment, and have thought that the article in question did not receive the recognition and notice which it merited. May I therefore place a couple of cases on record concerning this method which I have found most successful without any surgical interference in one case (the worst of the two), and which was preceded in the other by some operative manipulation?

Case 1.—R. L., æt. 14, consulted me in 1894. Father and mother both died of phthisis. Face first involved two years ago. In summer of 1892 she was in hospital, where she had "six injections into the back," one every week, this treatment being followed by improvement. About seven weeks after leaving hospital, the lesion began spreading again. For the last three months the right eye has been slightly inflamed and the lower eyelid swollen, the inflammation extending from an area of infiltration on right cheek. She complained of heat and itching in right eye.

Condition on commencing treatment.—The lower end of the nose is infiltrated with a thick patch of lupus vulgaris forming a thick crust measuring two inches transversely and one and a half inch vertically; surrounding this, and extending to the right side of the face, is an angry, dull, reddish-looking inflammation of skin continuous with a similar condition on right side of face, where there are again three crusts of lupus, not so large as on the nose. (Fig. 1.)

Treatment was commenced on May 9th, 1894, by giving Liquid Extract of Thyroid (Brady & Martin's), mv. bis die, in water. Now, mark the shortness of the period, when a response to the treatment was first noticed.

Fig. 2.

May 12th. Patient says she feels the skin of her face "softer" and "less tight" than it was. Nostrils do not feel so full as formerly. A small scale which has fallen off her right cheek has left a dry site which before was always wet after a scale fell.

Tablets of Thyroid Gland (Burroughs, Wellcome & Co.) i. t.d.s., in milk, powdered. The liquid extract was given again instead of tablets.

May 14th. One of the crusts fell off her face leaving a dry reddish surface; when crust from here was detached

previously, the site on which it stood was moist, with blood and matter oozing from it.

June 15th. The right eye is well. Crust on nose thinner; those on right cheek much diminished in size; much less redness and œdema of cheek. (Fig. 2.)

August 11th. There is only a small crust the size of a threepenny piece at end of nose. The crusts on cheek have nearly disappeared, and some red raised portions of skin on right cheek formerly occupied by crusts.

The photographs show the changes. The *second* was taken about six weeks after the first; the *last* about three months after. After August I lost sight of the case, and I know nothing of its further history. (Fig. 3.)

FIG. 3.

In my opinion some points of interest are:—

a. Instantaneous response to treatment.

b. Dryer surface left after falling of first crusts.

c. No surgical interference whatever.

d. The liquid extract seemed more successful than a dry preparation.

CASE 2, was that of a female domestic servant who had the characteristic lesion in the lobule of left ear. As time was of moment in this case I put her under æther, scraped, cauterised the site with a paquelin and dressed it with ung. iodoformi. Then the liquid extract of thyroid was administered for the best part of a year. There was no fresh invasion twelve months after.

J. R. EVANS, L.R.C.P. Lond., M.R.C.S.

Cartref, Narberth.

Change of Address.

Dr. R. A. Chisolm, from Guy's Hospital to the North-Eastern Hospital for Children, Hackney Road, Bethnal Green, N.E.

Dr. John Evans, from Shoreditch Infirmary to 54, Hunter Street, Brunswick Square, W.C.

Dr. D. R. T. Griffiths, from the County Infirmary, Brecon, to 16, High Terrace, New Quay, R.S.O., Cardiganshire.

Dr. W. G. Nash, from Welford, Rugby, to The Crescent, Wokingham, Berks.

Mr. Arthur W. Parrott, L.D.S., from Berkeley House, Ross-on-Wye, to Atherstone House, 21, Whiteladies Road, Clifton, Bristol.

Dr. W. Woolfe Read, from Burton Lodge, Loampit Hill, Lewisham, S.E., to Shoreditch Infirmary, Hoxton Street, N.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Pass List.

UNIVERSITY OF OXFORD, JULY, 1906.—DEGREES OF M.B. AND B.CH. CONFERRED.—L. J. J. Orpen.

UNIVERSITY OF LONDON.—M.D. EXAMINATION, JULY, 1906.—BRANCH I., MEDICINE.—J. H. Clatworthy, H. C. C. Mann, E. H. B. Milsom, E. C. Myott, H. F. Bell Walker. BRANCH III., MENTAL DISEASES AND PSYCHOLOGY.—G. Warwick Smith. BRANCH IV., MIDWIFERY AND DISEASES OF WOMEN.—L. S. H. Glanville. BRANCH V., STATE MEDICINE.—M. J. Rees.

Papers by Guy's Men.

Local Anæsthesia and Anæsthetic as employed in Dental Extractions, Rhinological and Minor Operations. By D. Lloyd Smith, M.B. Lond., M.R.C.S. Eng., and J. Taylor Hughes, L.D.S. Eng.—*Ibid.*

On Cancer. By Sir Samuel Wilks, Bart., M.D., F.R.S.—*British Medical Journal*, 7th July, 1906.

A Case of Fracture of the Upper End of the Tibia from Indirect Violence. By R. Lawford Knaggs, M.C. Cantab., F.R.C.S. Eng. Illustrated.—*Lancet*, 14th July, 1906.

Appendicitis and Abscess Formation. By John D. Malcolm, F.R.C.S. Edin. Illustrated.—*British Medical Journal*, 14th July, 1906.

On the X-Ray Shadows of Cystic and Xanthic Oxide Calculi. By Henry Morris, M.A., M.B. Lond.—*The Lancet*, 21st July, 1906.

A Lecture on the Necessity for and the Nature of the Treatment of the Backward Displacement of the Uterus. By Thos. G. Stevens, M.D., B.S., F.R.C.S., M.R.C.P. Lond.—*The Clinical Journal*, July 11th, 1906.

Notes from Practice. By W. J. Tyson, M.D., F.R.C.P., F.R.C.S.—*Ibid.*

In Aid of the Hospital.

Garden Fete at Lee.

"IN support of an endeavour to endow in perpetuity a bed in Guy's Hospital," a garden fête and fair was held in the grounds of the Cedars, Belmont Hill, Lee (by kind permission of Mrs. Penn), on the afternoon of Thursday, July 12th. The fête was opened punctually at half-past two by Mrs. Cosmo Bonsor, and immediately afterwards the various stalls and booths were besieged by eager sympathisers and enthusiastic visitors, the attendance being most gratifying. The fête owed its inception to the energetic enthusiasm of Miss Sparks and Mr. Harte Lovelace, who, in the short space of two months, endeavoured to gain the aid and support of a large number of Guy's friends resident at Blackheath and elsewhere—and succeeded excellently. Indeed, the list of patrons and patronesses of the fête would fill several columns of our space, and included the names of several of the members of the staff.

During the course of the afternoon the band of the Royal Artillery (by kind permission of the commanding officer) rendered a series of musical compositions by well-known authors, which were highly appreciated.

A walk round the grounds revealed the fact that no energy and care had been spared to render the booths and various side-shows as attractive and bright as possible. It is, in fact, impossible to do adequate justice to the excellence, both in arrangement and in decoration, of the booths. First came the sweet stall, over which Mrs. J. H. Davis presided, and at which the brisk attendance during the course of the afternoon showed the keen appreciation of the customers for the good things provided. Next came china and glass, a stall in charge of Mrs. Templer Down and Mrs. Mardlow Davis; after this was Mrs. Arbuthnot Lane's excellently-arranged flowers and fruit stall. Miss Sparks and Mr. Harte Lovelace persuaded many to invest in the various articles which they displayed on the silver table. Art was represented by Miss Colbourn, Miss Barrow and Miss Lay; Mrs. Warwick Crouch acted as lady superintendent of the Zoo, while Mrs. Collins, assisted by a number of ladies, attended in an exemplary fashion the refreshment stall. Mrs. Albert Kirby, whose services Guy's has already found so useful on more than one occasion, presided over the Irish stall, one of the most picturesque of the many attractive booths on the ground. Miss Balfour managed the post-office, while a party of Guy's students was strenuously engaged at the advertisement booth.

The side-shows were too numerous to permit of more than a passing mention, but special mention must be made of the excellent display provided on the tennis court, while the hat-trimming competition afforded much amusement. The palmist and phrenologist had their hands full, in more senses than one.

Where so many worked so ably, so enthusiastically, and so energetically, it would be invidious to single out any one for special comment. That the fête was such an excellent success as it has proved to be—since we understand that a substantial sum has been realised towards the charitable object which prompted the undertaking—is due to a great extent to Miss Sparks, and to Mr. and Mrs. Lane, and to Mr. C. L. Harte Lovelace, on whose shoulders fell the brunt of the secretarial work.

THE CONCERT.

On Thursday, July 12th, a party of Guy's men travelled down to Blackheath, to give a Concert at the Garden Fête, which had been arranged by a Committee of Ladies, for the purpose of raising money to endow a bed in Guy's Hospital. There were so many entertainments during the evening that the "Guy's" Concert, though timed to commence at 7.30, did not commence till 9.30. But in spite of the lateness of the hour, the concert enclosure was crowded to overflowing, and the rush of visitors was so great that the door-keepers were unable to collect all the money for the seats.

The first item was performed outside the enclosure by Mr. Reaside, who, for half an hour, by means of a dinner bell and a megaphone, called attention to the fact that *the* concert was just about to begin. Inside the walls the entertainment was of a more refined type. Mr. Watt, whose readiness to help Guy's is very much appreciated, entertained the company with a solo on the pianoforte, and a 'cello solo. Mr. Miller—one of the original "Disguysed"—told what he had heard about a certain Heroine, who didn't know she was the Heroine, and her husband, who wasn't really her husband, having previously married her mother, whom he was subsequently about to strangle. Mr. Kemp, who was very popular, was very entertaining in several humorous songs. He also performed various items of a nigger show, ending up with a clever stump speech, in which he explained the surprising difference between a cuckoo and an ostrich in the matter of laying eggs. Mr. H. B. Palmer sang, "I'd like to go halves in that," and it has been reported that he attempted to carry out his convictions when the proceeds of the day were being handed over to the Treasurer.

Messrs. Chapple, Davies, Endean, Reeve, and Wyatt, sang tenor, baritone, and bass solos in a most delightful fashion. Mr. Wyatt deserves much thanks for the trouble he took in getting up the entertainment.

BOOKS, ETC., RECEIVED.—Buchanan's Anatomy, vol. i.; Calder's Midwifery for Midwives; Elder's Ship Surgeons' Handbook; Wheeler's Operative Surgery; Bennett's Medical and Pharmaceutical Latin; Marsden's The Management of the Commoner Infections; Shaw's Treatment of Fibroid Tumour; Wallace's The Cause and Prevention of Dental Caries, and Modern Dietetics in the Causation of Disease; Medical Annual; Index to Remedies and Diseases; Starling's Advances in the Physiology of Digestion; Walsham and Spencer's Surgery; Luke's Anæsthetics; Rawlings' Muscles and Nerves; Treatment; The Medical Review; Bristol Medico-Chirurgical Journal; The Practitioner; Scientific Memoirs; Government of India; No. 23, The Anatomy and Histology of Ticks; No. 24, On a Parasite found in the White Corpuscles of the Blood of Palm Squirrels.

Reviews.

The price of books submitted for review should in every case be stated.

Recent Advances in Physiology and Bio-Chemistry. Edited by Leonard Hill. (Ed. Arnold.) pp. 740. 21s.

This book forms one of the most important connecting links, between physiology on the one hand and practical medicine on the other, which has, as yet, been forged. The old days of empirical medicine are fast falling into oblivion, and we are beginning to see that the only true and sound way in which the science and art of healing can be advanced is by a true and exact study of the organism in health; though here, too, we must remember that a diseased structure may not have the same reactionary powers as when it is sound.

It is with the idea of helping clinical work that this book has been written, and the subjects have been chosen on account of their fundamental importance to the physician as well as the physiologist; each article is complete in itself, and in fact contains, in a clear and condensed manner, the results of all the work that has been done on the subject. There is an ample bibliography at the end of each section for those who may wish to follow up the subject more fully. The names of the five contributors are sufficient guarantee of the thoroughness of the work; they are Benjamin Moore, Leonard Hill, J. J. R. McLeod, M. S. Pembrey, and A. P. Beddard.

Space does not permit us mentioning all that has been written about, but to show the practical nature of the work we may say that among the most important articles are the following:—Diabetes in its varying aspects, a most interesting and instructive chapter; Uric Acid Metabolism; the Metabolism of Fat and the treatment of Obesity; Hæmolysins and Immunity, and many others of equal importance. Perhaps the most interesting is the chapter on the Respiratory Exchange; this has long been a source of great contention between the two schools of physiology—the physical and the vitalistic; here all the facts, including the effects of work, food, temperature, age, are skilfully set forth by Dr. Pembrey (who by the way, does not fail to bring in his well-known views on modern civilisation) with an unbiassed mind, leaving the reader to decide for himself which is the correct view; indeed, this idea has been carried out all through the book, "so as to make the student think out problems rather than learn facts in a parrot-like way."

This volume may well be read by every one, from the student of physiology, as yet unqualified, to the practitioner of many years standing, with equal benefit. We are promised a second volume if the book attains the success which it well deserves, and we await its coming with great interest.

The Medical Annual for 1906. (Messrs. J. Wright and Co., Bristol.) Pp. 641. 7s. 6d. net.

The character of this annual publication is too well known to need minute description, and the present instalment thoroughly maintains the excellent standard reached by its predecessors. We are often told that the busy practitioner has no time to keep abreast of the times and make himself familiar with all the recent discoveries; by the aid of this annual he can, however, obtain a very good idea of all the forms of treatment discussed during the preceding twelve months.

Although the work is confined to treatment both surgical and medical, we are given many glimpses into pathology and symptomatology, so that we are surprised to find in this issue no general remarks on cancer, no allusion to Butlin's Bradshaw lecture, the cancer research work is not mentioned, and nothing is said of the use of serum in the treatment of cancer.

There is an excellent article on Syphilis, with a good review of Col. Lambkin's paper on intramuscular injection, and a résumé of Metchnikoff's work, though no mention is made of his latest discovery, that chancre produced in an ape by inoculation can be made to abort by inuncting with calomel ointment. Ethyl chloride as an anæsthetic is fully discussed in an article which, however, does not indicate the reaction which has recently set in against its use.

There are some excellent plates, coloured and uncoloured, though we consider the series illustrating a radical mastoid operation as very poor. We are surprised to find no reference to opsonins, but having delivered ourselves of these few criticisms, can thoroughly commend the work, and heartily congratulate the publishers and editors on the excellence of this year's issue, which was only arrived at in the face of enormous difficulties, as a fire destroyed much of the type after it was set up, as well as many of the MSS.

Lectures on Tropical Medicine. By Sir Patrick Manson. (Arch. Constable & Co.) Pp. 230. 7s. 6d. net.

These lectures were delivered at Cooper Medical College in San Francisco in August, 1905, and form an excellent résumé of the present knowledge of tropical diseases. Pleasantly written and well illustrated they make capital reading, and should prove invaluable as an introduction to the study of tropical medicine.

Sir Patrick Manson utters a plea for more careful investigation of tropical diseases by the physician of temperate climates, and condemns the practice, which is only too common, of carelessly diagnosing malaria in all cases of fever occurring in patients who have travelled in the tropics. Again, many medical men who go to the tropics are inclined to expect every form of disease to be strange to him, and to forget that he will see typhoid, small-pox—even whooping-cough, and many home friends.

To read this book is to have a vision of a new science in its infancy, and to be enabled to realise what vast fields of research still lie open for the skilled observer. The common complaint of the student who would do research work, is that there is but little opportunity of originality. In the study of tropical disease he can, however, easily find virgin soil, as new diseases yet

remain to be discovered, and numberless gaps still occur in the life histories of many of the causal parasites.

Of the various chapters, that on guinea worm reads like a fairy tale; that on malaria is most useful, and we learn that tertian and quartan fevers are always malarian, but that quotidian—however periodic it may be—is not necessarily malarian. Dysentery, again, we are told, may be fever accompanied by blood in the stools throughout the disease,

The Animal Parasites of Man. By Dr. Max Braun. Translated by Pauline Falcke. Edited by L. W. Sambon, M.D., and F. V. Theobald. (John Bale, Sons & Danielsson, Ltd.) pp. 453.

This is the first English translation of Dr. Braun's book, which has reached its third edition in Germany. The justification for such a work is to be found in our ever-increasing knowledge of "parasitic" diseases, especially those of tropical countries. This book partakes more of the nature of a zoological treatise than of a medical text-book, just so much of the disease being introduced as to render the life history of the animal intelligible. The latter—life history—is treated fully, as also is the appearance and zoological features of the groups and individuals, with numerous statistics as regards occurrence and localisation. Where necessary the editors have added new matter to bring it well up to date.

It is difficult to pick out any particular group where all are good; suffice it to say that every known parasite in the animal kingdom is mentioned.

Every credit is due to the editors for their labours, and also to the translator, who has acquitted herself well. The book will prove a very useful one for reference purposes.

Novelties.

The Equipoise Couch.

This is a newly-invented bedstead which permits of "a ready change to any position, from the recumbent to the sitting, without the slightest effort." That, at least, is what the prospectus says, giving at the same time a neatly-drawn picture of the couch, which lack of space unfortunately forbids us reproducing. When the bedstead itself appeared in Naaman ward, whither it had been sent for a brief trial, it was easily seen that the prospectus had not exaggerated the merits of the "Equipoise" Couch. It is true the couch possesses some disadvantages; it is, for instance, heavy and somewhat cumbrous looking, but these are more than compensated for by its obvious good points. By means of a simple yet ingenious rack-work slide, the patient can be raised or lowered into almost every variety of position, from the flat dorsal to one perfectly upright. The extra comfort to the patient, and the saving of energy on the part of the nurse when this bedstead is used, are such that we feel sure that the "Equipoise" will become popular in both public and private hospitals and nursing homes. If we may be allowed to make one suggestion, it would be to fix some arrangement to the couch whereby the foot can be raised or the head lowered. Such an arrangement would be of great value in cases where it is desired to sink the head and elevate the feet—as in cases of shock—and as at present manufactured the bedstead does not permit of any great degree of lowering, although it serves excellently to raise the patient without the least effort or trouble on the part of the nurse. The makers of the bedstead are the "Equipoise Couch Company, Ltd.," Ashford, Kent, from whom estimates and all particulars may be obtained on application.

The 'Amico" Hammock.

This is a strong, firm and easily-adaptable hammock, slung on a strong bamboo support. It possesses a central cushion, which acts as a modified bed-rest and prevents the patient from slipping down, and is made with overwrapping sides, which protect the occupant from chills and at the same time serve to retain the rugs in place. It is made of strong tan duck canvas, which can be easily disinfected, and has several side cords by means of which the hammock can be steadied and prevented from swaying from side to side. It is at present in use in Clinical Ward, and is highly appreciated by those patients who have used it. Full particulars as to price, etc., may be obtained from Miss Horne, Castle Grounds, Devizes.

Appointments.

Civil.

Chisolm, R. A., M.A., M.B., B.Ch. Oxon., has been appointed Resident Medical Officer to the North Eastern Hospital for Children, Hackney Road, N.E.

Edwards, Charles, L.R.C.P., M.R.C.S. Eng., has been appointed Honorary Medical Officer to the Dispensary and the Hospital, Bridport.

Read, W. Woolfe, M.R.C.S., L.R.C.P. Lond., has been appointed Senior Assistant Medical Officer to the Shoreditch Infirmary.

Naval and Military.

Surgeon J. G. Watt, R.N., has been appointed to the *Sirius*, Surgeon P. F. Minett, R.N., to the *Vivid* for disposal, to be lent to Plymouth Hospital, and Surgeon F. G. Goble, R.N., to the *Pembroke* for disposal, to be lent to Chatham Hospital.

Colonel F. W. Trevor, M.B., from the Royal Army Medical Corps, is promoted to be Surgeon-General, Army Medical Staff. Surgeon-General Trevor's war record includes the Afghan War of 1878-80, with the Kandahar Field Force, when he was present at the action of Ahmed Khel, in the march from Kabul to the relief of Kandahar, and in the battle of September 1st (medal with two clasps and bronze decoration); the Nile expedition in 1884-5 (medal with clasp and Khedive's bronze star); and the South African War, 1901-2, as Principal Medical Officer of a Division, including operations in the Transvaal, the Orange River Colony, on the Zululand Frontier, and in Cape Colony (mentioned in despatches, Queen's medal with five clasps).

Sport.

Cricket.

GUY'S v. R.A.M.C.

Played at Honor Oak on Wednesday, July 4th; an interesting game, ending in a win for the Hospital half-an-hour from time. Fox and Morres made a good start, and later Morres and Chase hit very well. With the total 301 Guy's declared, leaving the R.A.M.C. two hours and three-quarters to get the runs. These they failed to get, though Nimmo batted well for 90 not out. Chase bowled very well for the Hospital. Scores:—

GUY'S.

F. Morres, c and b Wells	105
W. E. Fox, c Staff, b Wells	30
M. M. Munden, b Nimmo	11
R. G. Chase, b Steele	64
P. Smith, b Nimmo	29
H. Archer, c Coggan, b Keeble	14
W. E. Digby, b Keeble	8
W. Ingram, b Nimmo	15
P. Pedrick, not out	9
Extras	16
Total	*301

W. T. Clarke and S. W. Jamieson did not bat.

*Innings declared closed.

R.A.M.C.

Capt. McPherson, c Jamieson, b Archer	16
Pt. Staff, b Chase	5
Sergt. Steele, st Digby, b Archer	22
Lieut. Nimmo, not out	90
Pt. Hamilton, b Chase	8
Pt. Light, b Chase	0
Pt. Gaffney, c Morres, b Chase	23
Pt. Keeble, b Jamieson	5
Pt. Wells, b Morres	16
Corpl. Fryer, c Jamieson, b Chase	6
Sergt. Coggan, b Jamieson	11
Extras	30
Total	232

GUY'S v. HAMPSTEAD.

Played at Hampstead on Saturday, June 30th. Although the Hospital had the worst of the wicket they gave a poor display, and were easily beaten. Scores:—

GUY'S.

A. M. Tolhurst, c Hayman, b Marsden	0
F. Kahlenburg, c sub., b Preston	0
H. Archer, b Preston	0
M. M. Munden, lbw, b Preston	7
W. Ingram, b Preston	11
H. V. Gibbons, b Marsden	10
G. C. Covell, c Beaton, b Marsden	2
W. T. Clarke, b Preston	0
F. C. Hunot, not out	1
S. W. Jamieson, run out	0
W. Doll, b Preston	0
Extras	16
Total	47

HAMPSTEAD.

D. J. Crump, c Ingram, b Clarke	53
F. W. Orr, b Jamieson	53
G. C. Dumbleton, lbw, b Clarke	19
P. D. Robertson, b Kahlenburg	15
H. B. Hayman, b Jamieson	110
E. L. Marsden, c Covell, b Jamieson	23
E. W. Beaton, not out	31
T. M. Farmiloe, b Jamieson	10
Extras	30
Total	344

W. T. Danby, H. C. Preston and H. Crisp did not bat.

GUY'S "A" v. OLD OLAVIANS.

This match was played at Honor Oak Park on July 7th, and resulted in a win for Guy's by 103 runs. Score:—

OLD OLAVIANS.

P. Brownlow, c Lee, b Townrow	52
S. E. Fryer, b Townrow	4
W. B. Owen, b Digby	0
A. H. Wilson, b Townrow	0
E. Lugg, run out	2
A. C. Grant, b Townrow	0
C. Powell, b Townrow	1
C. H. Owen, b Digby	2
W. Burton, b Townrow	1
S. Westover, b Digby	16
Krauss, not out	4
Extras	13
Total	95

GUY'S "A."

H. Munden, c & b Owen	15
W. E. Fox, c Burton, b Owen	30
M. M. Munden, c Owen, b Powell	37
E. L. Norton, c C. Owen, b W. Owen	2
H. Lee, b Wilson	10
W. E. Digby, c Brownlow, b Owen	46
F. C. Hunot, c Owen, b Wilson	7
W. Ingram, not out	28
J. F. Young, c C. Owen, b W. Owen	5
V. Townrow, b Wilson	1
L. Kemp, b Owen	7
Extras	15
Total	203

GUY'S v. LONDON.

INTER-HOSPITAL CUP TIE (SEMI-FINAL).

Played at Winchmore Hill. Barnett won the toss for Guy's, and, with Chase, gave the Hospital a good start, but after the fall of the third wicket a breakdown in the batting took place. Archer, however, batted very pluckily and well, and was last out for a well-hit 77.

Set 235 to get to win, London started well and put up the hundred for the loss of only two wickets, but Scott was missed when five, and Burgess before he had scored. The fifth wicket fell at 223, and the sixth with the match a tie. Then the seventh and eighth wickets fell at the same total, and the match became quite exciting, but was tamely settled by the calling of a no-ball. With the scorers not quite sure of the total, another over was bowled, and in this the ninth wicket

fell without addition to the score, so that but for the unfortunate no-ball the game might have ended in a tie. Hancock played well for London, but was lucky, as besides being caught at the wicket when 40, several other strokes nearly went to hand.

The Guy's fielding was very poor, which was especially disappointing, as it had often before this season been very smart. Scores:—

GUY'S.

E. Barnett, c Watson, b C. T. Scott	56
G. Chase, c Standish, b J. Linnell	25
M. M. Munden, b Burgess	11
P. Smith, st Watson, b Linnell	17
H. Archer, lbw. b Scott	77
H. V. Gibbons, lbw, b Scott	3
A. M. Tolhurst, c Paget Tomlinson, b Scott	1
G. C. Covell, b Scott	8
S. W. Jamieson, b Scott	3
W. Doll. b R. Linnell	7
F. Kahlenburg, not out	0
Extras	26
Total	234

LONDON.

H. A. Hancock, not out	110
F. Standish, c Barnett, b Kahlenburg	18
E. T. Scott, c & b Kahlenburg	23
R. Burgess, c Barnett, b Chase	22
H. F. Noyes, c Smith, b Kahlenburg	8
E. Paget Tomlinson, c Jamieson, b Kahlenburg	27
R. McLinnell, b Kahlenburg	4
F. Armitage, b Jamieson	0
C. Gibson, b Jamieson	0
J. Linnell, c Jamieson, b Kahlenburg	0
G. H. Watson, not out	0
Extras	23
Total (9 wickets)	235

GUY'S v. ST. BARTHOLOMEW'S.

FINAL OF INTER-HOSPITAL JUNIOR CRICKET CUP.

This match was played at Honor Oak Park on July 16th, and resulted in a win for Guy's by 8 wickets. In the first innings both sides were dismissed for 128, Davies taking 7 wickets for 46, and Tucker 7 for 49. In the 2nd innings Bart.'s were all out for 75. Davies again bowling excellently, took 6 wickets for 23. We knocked off the runs for the loss of 2 wickets. Score:—

GUY'S.

	1ST INNINGS.	2ND INNINGS.
H. Munden, b Tucker	11	
W. E. Fox, b Tucker	19	not out 26
W. Ingram, c Snowden, b T'ckr	5	b Craddock 1
W. Clarke, c Lynn, b Craddock	7	
H. Lee, b Craddock	14	c Kendrew, b Craddock 11
F. C. Hunot, c Lynn, b Tucker	6	
C. B. Ticehurst, b Tucker	0	
J. F. Young, b Craddock	13	not out 32
V. Townrow, not out	16	
W. E. Rutter, b Tucker	11	
L. G. Davies, b Tucker	6	
Extras	20	Extras 10
Total	128	Total (2 wkts.) 80

ST. BARTHOLOMEW'S.

	1ST INNINGS.	2ND INNINGS.
E. N. Snowden, st H. Munden, b Davies	13	b Davies 5
A. F. Kendrew, b Townrow	9	b Ticehurst 5
J. A. R'nshaw, c Hunot, b D'vies	0	not out 13
C. K. Sylvester, b Young	41	b Ticehurst 1
B. A. Keats, b Davies	11	b Davies 4
S. A. Tucker, b Young	2	b Davies 6
R. Lynn, b Davies	1	b Davies 4
L. F. Way, c Lee, b Davies	15	b Davies 0
H. Rimington, b Davies	19	b Ticehurst 10
D. B. Pascall, not out	1	c Young, b Tc'hrst 6
J. Craddock, b Davies	0	b Davies 10
Extras	16	Extras 11
Total	128	Total 75

Guy's Hospital Rifle Association.

On the 12th inst. the team went to Bisley, and compiling the record score of 270 points, easily won the Bisley Cup, officially known as the United Hospitals Cup. The conditions were perfect for shooting, and the whole team were in form. French and Cooper only dropped two points each in their ten shots, the latter only getting out of the "bullseye" once. Henderson should have made 45, as he unfortunately put a "bull" on the wrong target. Scores:—

R. E. French	48
J. S. Cooper	48
C. B. Ticehurst	47
G. A. Blake	44
L. L. C. Reynolds	43
H. J. Henderson	40
	270

Mary's made 248, and Bart.'s 226.

A further kindly donation towards the prize fund was received from Mr. L. A. Dunn, too late for acknowledgment in the last issue of the GAZETTE.

Birth.

HOLLIST.—On July 15th, at 229, Balham High Road, S.W., the wife of Gerald W. Hollist, M.R.C.S., L.R.C.P. Lond., of a son.

Marriage.

ROBERTS—DRING.—On July 5th, at St. John's Church, Buckhurst Hill, by the Rev. E. P. Blakeney, M.A., Vicar, brother-in-law of the bride, Samuel Roberts, B.A., LL.B., eldest son of Samuel Roberts, D.L., M.P., of Queen's Tower, Sheffield, to Gladys Mary, second daughter of William E. Dring, L.R.C.P., etc., of Buckhurst Hill, Essex.

Death.

POWELL.—On May 3rd, 1906, at Benani Hospital, Transvaal, South Africa, William Austin Powell (a student at Guy's Hospital from 1895 to 1898), aged 33.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

A WISE custom decrees a month's holiday for the "Passimist" during the dog-days of the vacation. Some people find holidays too long, and some, like the old lady in "Bleak House," who was perpetually waiting judgment for her suit, find vacations excessively tedious, but few indeed can think a month of enforced idleness so wearisome as those who have to cater for this column. It is an old grievance that the dog-days yield nothing which by a stretch of imagination can be made interesting news items in Passim. There are no lectures. Hospital politics and hospital scandals furnish no matter for discussion. There is nothing, or next to nothing, on which the most eager penny-a-liner, fiercely bent on stretching his copy to the furthest limit which its interest permits, can write more than a brief paragraph. Under such conditions, Passim cannot be much more than an apology for its presumption in occupying the front page of this fortnightly, while at the same time it may serve as a reminder to the reader that there is unlimited scope for him to extend a helping hand in favouring the GAZETTE with news items or topics which may be of interest, or which may at least serve as a peg on which to hang a paragraph.

IT is during the dog-days that the Passimist turns with hopeful expectation towards the exchanges, and pounces gratefully upon any article in a contemporary which may yield food for thoughtful — or otherwise — disquisition. This time we have to thank Dr. Halliburton for his contribution to *The Broadway*, which comes as a veritable God-send to one whose lot it is to make bricks without straw, and sometimes without clay. In the *Gazette* of the Westminster Hospital, Dr. Halliburton unburdens himself on the important question of examinations, examiners, and examinees. It is a subject upon which so eminent an examiner is specially fitted to speak, and his remarks and conclusions are well worth attention. The few of us who may have suffered at his hands will find in this article some measure of apology for his strictness, and the larger number who have found him their ideal examiner will be equally interested in his description of the perfect examinee, and flatter themselves that they, at least, fully came up to that exact standard.

MODERN examinations, so far as the medical profession is concerned, Dr. Halliburton considers by no means such perfect trials of a man's

excellence as some of their advocates would have us believe. He points out, for instance, the absurdity of the conservatism that forbids a teacher from examining his own pupil—a conservatism that still holds sway over the College and Fellowship examinations. He attacks the system of hurry and haste which prevails at most examinations, a system of which it seems the object is to find out, in the shortest possible period of time, how much the candidate does not know of the greatest possible variety of things which are of the least use to him in after life. It is unjust, he remarks, to insist that an examinee should be omniscient, even within the limits of the prescribed syllabus, on the day of the examination, and to make no allowance for ill-health, nervousness, or the other concomitant factors that conspire to force a candidate who knows his work to write a paper which appears a nightmare the moment he has left the hall. All this is very true, but Dr. Halliburton is not the first to point out that our system of examinations is, in many senses, a travesty of the ancient trial by ordeal. One wishes to know what his ideal is, and how he proposes to attain to it. Unfortunately he tells but little on these points. Certainly the ideal examination, according to Dr. Halliburton, is not to be found in the Conjoint, Fellowship, or University examinations. In an admirably semi-sarcastic fashion he explains the examiners' feelings at the assortment of objects on the physiology table at the Second. It is invariably the same, slides, test tubes destined never to be used, reagents doomed to lose their efficacy without being put to the test, the "bit of lung invariably mistaken for liver," and the whole assortment of hallowed relics which we know most candidates regarded with horror, and which we are now told the examiners look upon with almost equal aversion. The ideal examination is that of the Institute of Chemists, a purging of the gold from dross that lasts for days, at which the raw material is allowed to use note-books and unlimited time, and where the results are judged with the nicest discrimination. Such a system, however, has its obvious difficulties, and how these are to be overcome Dr. Halliburton does not say.

Perhaps the most interesting part of his paper—the only fault of which is that it is so short—deals with the ideal examiner and examinee. The perfect examinee is the student who knows his work well enough to impress the examiner with the fact that he does know it, who does not give way to nervousness, and is frank without being impulsive. The ideal examiner, again, is the man who is able to make allowance for any shortcomings in the candidate before him; who "does not set questions out of the small print" (surely an important point); is a gentleman first and an examiner afterwards; who is just without being inexorably strict, and lenient without being partial; and who, above everything, has had a large and varied experience of examinations and examinees. In the one case the ideal can only be obtained after a probationary period during which one shudders to think how many candidates will have to be "ploughed" before the examiner attains to what Madame Blavatsky whould have termed "his complete manaventarah." In the other—well, some students may be born with a capacity for becoming ideal examinees, but it is highly improbable that the majority of candidates will exhibit that conglomeration of virtues with which Dr. Halliburton endows his ideal examinate.

The Fancy Fair and Garden Fête at Blackheath has proved an even greater financial success than was anticipated The detailed statement of profit and loss which we have received, shows that it has resulted in a gain of £300 odd towards the funds for endowing a Blackheath bed or cot in the hospital. Amongst the contributions which go to make up this sum the spontaneous donation of ten guineas by the workmen employed on the sewers is especially worth mention. We understand that a party of workmen became interested in the Fair and in the object which its organisers had in view, and on the following day sent their generous contribution to the Secretary as a mark of their appreciation of the work done at Guy's.

We have such a surfeit of clinical material in the wards and the front and back surgeries that

most of us have little time to spare for the equally rich treasures of theoretical and statistical material to be found in the Registrars' rooms. Yet it must be evident that there exists, in the bound volumes over which the surgical, medical, and obstetrical Registrars keep guard, in the collection of post-mortem reports, and in the somewhat chaotic and uncollated pile of anæsthetic papers, a vast amount of information which would well repay the man who devotes himself to the task of ferreting it out. Statistics are not always dry and unpalatable, and in medicine at least they are sometimes of decided value. For the compilation of tables of incidence and ætiology there is so much material available that it is surprising to find that so few enthusiastic researchers have endeavoured to make use of it. Some use has been made of the surgical, medical, and obstetric catalogues, but, so far as we know, the rich material which lurks in the anæsthetic reports has been entirely overlooked. The Gas room books at the time of Dr. Cock were written up carefully and neatly by the anæsthetist himself, and a *résumé* of the notes to be found in them will in itself make a respectable and accurate text-book of anæsthetics. It requires only the painstaking care of someone who is willing to cover himself with dust in rummaging among the heap of grimy papers to be found, we believe, in the Medical School buildings, and the labour and care will, we venture to think, be rewarded by the results.

Nor is it only in the manufacturing of text-books or lengthy statistical tables that the full value of our stored clinical material will be apparent. Its usefulness will be equally marked in small items. The little summary of cases of hepatic disease which was published in our last issue is an instance of its usefulness in such. We know there are some who have made collections of facts—or statements—from the reports for themselves. One man may be interested in some special feature of a case under his care, and proceed to look up the reports to find out whether that feature was a common concomitant in other cases, in support or in denial of his Osler or his Taylor. In the course of his searching he lights upon other points of interest sufficient to warrant him transferring them in copy to his note-book. It is to such enthusiasts that we would appeal. The columns of the Gazette are always at their disposal for the publication of any collection of ætiological, statistical, or other facts that may have been culled from the Registrars' rooms, and we shall always be glad to insert anything, whether brief note or more carefully compiled summary, that may be of use or value to compilers in the future—as indeed all such information, carefully looked for and as scrupulously recorded, must necessarily be.

While on the subject of compilations in general and medical compilations in particular, we beg leave to draw the attention of the Library Committee to a matter which is well worth their consideration. There is in the Wills Library at present an incomplete set of the Surgeon-Generals' Catalogue, a set which is not up to date, and which is therefore not of much value to the student in search of references. For the information of those who have not learned to appreciate, regard and love that venerable mine of information, it may be stated that the Surgeon-Generals' Catalogue is a set of weighty volumes, bound in green cloth and containing references to practically every paper on any conceivable subject in the various departments of medical science that one can think of. These references not only include the standard works and papers, but anything and everything which has been written on the subject. Inaugural dissertations, articles in out-of-the-way journals—lay as well as scientific—and even manuscripts, are included, and so full and complete are the citations that it would be difficult to find a reference on any medical subject which is not to be found in the S.G.C. Every year this magnificent subject catalogue—the only one of its kind which is availabe for every library—is added to, and as it is a government publication, and that government the States, which spares neither expense nor trouble to make its scientific compilations as good as they can be made, its usefulness is obvious. It is to be

hoped that the Library Committee will see their way clear to acquiring the intermediate volumes necessary to make the set we possess complete, and to subscribe to the catalogue in the future.

Pass List.

University of London, July, 1906.—Preliminary Scientific Examination (Part I.)—Entire Examination.—G. A. Blake, A. H. Gool, H. L. Hopkins, C. D. Killpeak, H. P. Warner. Chemistry and Biology.—*J. A. Delmege, *A. G. H. Moore. Experimental Physics and Biology.—*H. Davies, V. Glendining. Chemistry only.—*W. H. Talfourd Jones. Experimental Physics only.—G. Covell, L. B. Stringer, *B. T. Verver. Biology only.—C. Aldis, F. C. Hunot, *E. G. Reeve, T. E. Roberts, *A. H. Todd. Intermediate Science.—F. Cook, E. G. Schlesinger, A. H. Todd. Preliminary Scientific Examination (Part II.) Organic Chemistry.—R. P. Ballard, W. H. Catto, F. A. Dick, G. Dunderdale, M. A. E. Duvivier, H. Gardiner, G. R. Hind, G. Maxted, G. T. Mullally, E. A. Penny, R. Stout, T. D. M. Stout, G. Y. Thomson. Intermediate Examination in Medicine.—M. M. Cowasjee, S. J. Darke, A. A. Greenwood, H. B. Kent, W. S. Kidd, R. A. Rankine (distinguished in Physiology).

Conjoint Examining Board, July, 1906.—First Conjoint Examination.—Chemistry and Physics.—L. C. W. Cane, H. W. Doll, S. W. Jamieson, W. S. Lacey, W. E. Levinson, M. C. Wall. Elementary Biology (Part III.)—E. C. Cline, W. E. S. Digby, W. S. Lacey, W. E. Levinson, H. G. Spain. Practical Pharmacy (Part IV.)—S. K. Poole, O. T. Slatter, G. G. Timpson.

Royal College of Surgeons of England, July, 1906.—Preliminary Science (L.D.S.)—Chemistry (Part I.), Physics (Part II.)—P. S. Harrison, G. Hunt, L. A. B. King, E. Smith, T. Townend.

Final Conjoint Examination, July, 1906.—Medicine, Surgery and Midwifery.—*S. W. Daw, *E. W. Giesen, *W. H. Miller, *G. F. Stebbing, *E. Wragg. Medicine and Surgery.—G. F. E. Allison, *C. M. Ockwell, *H. A. Pallant, *P. K. Taraporwala. Medicine and Midwifery.—E. H. Adams, J. H. Mayston, A. Zorab. Surgery and Midwifery.—G. R. Phillips. Medicine only.—E. Alban, J. S. Bookless, *R. D. Barron, M. Leckie, P. D. F. Magowan, *H. C Malleson, J. E. Prentis, *Richard P. Rowlands, A. T. Rivers, and H. E. H. Tracy. Surgery only.—I. R. Cook, *P. C. Litchfield, *P. F. McEvedy, H. V. Mitchell, and *C. W. Ponder. Midwifery only.—*W. H. S. Burney, M. M. Earle, C. E. M. Jones, C. W. R. Preston, J. L. Rankine, S. McK. Saunders, L. D. Stamp and R. Willan.

Examination for R.A.M.C.—A. M. Benett, C. H. Denyer.

* Denotes completion of examination.

Telegony.

Paper read before the Physiological Society by C. H. Crump.

Mr. Chairman and Gentlemen—When I promised to write a paper on Telegony I did not realise how difficult a matter it would prove to be, for so few definite and conclusive experiments have been done, and what evidence there is is of such a conflicting nature that it is no easy task to come to any real conviction as to the truth or otherwise of the theory. Therefore, I hope you will pardon me if my paper is but brief and sketchy, serving merely to indicate to you the better known facts concerning telegony in the hope of turning your thoughts to what is undoubtedly a most interesting subject, worthy of more attention than is generally given to it.

To begin, we must have a good working definition, and I think the following is as comprehensive and simple as any that has been given, viz. :—"*Telegony is the name given to the belief that the constitution of an impregnated female is altered and tainted by the peculiarities of the impregnating male through the fœtus, so that she transmits such peculiarities to any offspring she may subsequently bear to other males.*"

To the belief in the truth of telegony we must accord all the respect and veneration due to extreme old age, for we find it was regarded as beyond question by breeders and stockowners as far back as the middle ages, although there is no evidence of the matter ever having been put to the test in any definite fashion. The term *infection* was applied to it, and the dam was said to have been "infected" by her former mate.

At the end of the 17th century a writer (Beecher) says, "When a mare has had a mule by an ass and afterward a foal by a horse, there are evident marks on the foal of the mother having retained some ideas of her former partner, the ass. Moreover, the belief is still strongly held by their successors in these modern days, and they take all kinds of precautions to guard against any such adverse infection of their stock." I have discussed the question with breeders of dogs and horses, and find they are firmly convinced of the facts, although unfortunately I have not been able to come across anyone who has directly witnessed any instance of it.

Here, perhaps, I may be pardoned if I just briefly mention the importance of the matter as regards the breeding of animals. If the law of telegony be accepted, then a pure-bred female would be spoilt, as far as her future progeny are concerned, by *one* mating with an inferior male, while, on the other hand, the offspring of a cross-bred female would be improved by a first mating with a thoroughbred male.

Now, if on evidence which, as I have said, is incomplete and insufficient, I were to dogmatise on the subject and give you only one side of the question, I feel I should be acting unfairly both to you and to my paper. Therefore, I purpose giving you the evidence, as far

as I can, both for and against. I will tell you my conclusions and why I have arrived at them, and then leave you to form your own judgment.

The classical instance cited in support of the law of telegony is that of a mare belonging to Lord Morton, of which a record is kept in the Royal College of Surgeons. The history of the case was given by Lord Morton in a letter to the President of the Royal Society (read in Nov., 1820). In it he states that, wishing to domesticate the quagga and having obtained a male, but not a female, of that species, he made an experiment. He says, "I tried to breed from a male quagga and a young chestnut mare of $\frac{7}{8}$ Arabian blood which had never been bred from; the result was the production of a hybrid (female), now 5 years old, bearing both in her form and colouring very decided indications of her mixed origin." This, of course, we should naturally expect; but now comes something quite unexpected. He continues, "I subsequently parted with the $\frac{7}{8}$ Arab mare to Sir Gore Ousely, who has bred from her by a very fine black Arabian horse. I yesterday examined the produce, namely, a two-year-old filly and a year-old colt. They have the character of the Arabian breed as decidedly as can be expected when $\frac{15}{16}$ of the blood is Arabian, and they are fine specimens of that breed, but both in their colour and in the hair of their manes they have a striking resemblance to the quagga. The colour is bay, marked more or less like the quagga in a darker tint. Both are distinguished by the dark line along the middle of the back, the dark stripes across the forehead and the dark bars across the back part of the legs."

Against this instance it has been urged—first, that high-caste Arab horses are frequently marked; again, that cross-bred foals out of Arab mares sometimes present far more distinct markings on the legs than did the foal in the foregoing instance; and lastly, that no control was carried out, *i.e.*, that there is no reason to believe that if the mare had been put straight to the Arab horse without a previous mating with the quagga her foal would have been any less marked.

In answer to these criticisms, I think it is remarkable that even if the first two objections should hold good, the foal should present such distinct markings characteristic of the quagga. If Arab horses are sometimes striped at birth, why in this instance should those stripes be those which would appear on a quagga if the quagga did not have something to do with it?

A few years ago the experiment was repeated, using a Burchell's zebra in place of the quagga, which had in the meantime become extinct. A well-marked specimen of Burchell's zebra was put to a number of mares, and subsequently these mares were mated, some with thoroughbred, others with crossbred, and yet others with Arab horses. At the same time a number of control experiments were carried out. Thirty mares were used, and the results were 17 hybrids, 20 foals from mares which had previously been mated with the zebra, and from the controls 10 pure-bred foals. Of the 20 foals from mares previously mated with the zebra, three were striped at birth. These three were from Highland mares. Equally distinct markings appeared on three other foals, also coming from Highland mares which had been used, in this case, as controls. Two were striped at birth, and the markings appeared on the third when it shed its coat. These markings in the latter case were permanent, while the stripes on the foals from the mares which had been put to the zebra and subsequently to horses, disappeared on the animals shedding their coats. None of the remaining 17 showed any signs which could be said to be due to the first mating with the zebra, a point which you will see is quite against our theory.

There is another case, mentioned by Spenser, of which there is also a record kept at the Royal College of Surgeons. In this instance a parallel fact was noticed in the case of some pigs. It is contained in a letter sent by a gentleman named Giles to the Royal Society. A sow of a black and white breed was put to a wild boar of a deep chestnut colour. The pigs produced, which were her first litter, partook in appearance of both boar and sow, but in some the characteristic colour of the boar prevailed. Soon after, the boar was accidentally killed, and some time having elapsed the sow was put to a boar of her own breed. The produce was a litter of pigs, some of which, much to the surprise of the gentlemen aforementioned, were observed to be stained and clearly marked with the chestnut colour which had prevailed in the former litter. The writer of the letter adds that in the course of many years' experience he had never known the least appearance, except in this solitary instance, of the chestnut colour in any individual of this breed.

Romanes mentions another instance, of which an account was given in the *Field* of December 14th, 1892. It took place in the Zoo, where a wild ass of one species was mated with one of another species and subsequently with another of her own breed. The second foal presented an unmistakable resemblance to the first sire.

Since I have quoted Romanes, I think I could not do better than to give you his opinions on the subject. He says: "The phenomenon is of much less frequent occurrence than is generally supposed. Indeed it is so rare that I doubt whether it takes place in more than one or two per cent. of cases. I must add, however, that nearly all my professional correspondents would deem this an absurdly low estimate. Most of them are quite persuaded that it is of frequent occurrence, many of them regard it as a general rule, while some of them go as far as to make a point of always putting a mare or bitch, etc., to a good pedigree male in her first season so that her subsequent progenies may be benefited by his influence, even though they be engendered by inferior sires. . . . That the phenomenon does occur in some small percentage of cases there can be no reasonable doubt; as a result, I mean, of analysing the hundreds of cases which have been submitted to me especially with regard to dogs. One thoroughly well-observed case occurring among pedigree animals is worth any amount

of slip-shod statements, where precedent, belief, insufficient isolation, exaggeration of memory, and so forth, have to be allowed for. On the present occasion space does not permit of giving such special instances, so I must ask it to be taken for granted that my evidence is enough to prove the fact of a previous sire asserting his influence on a subsequent progeny, although this fact is of comparatively rare occurrence. It may be added I have failed to find any good evidence of it ever having occurred in the case of man; for although I have met with an alleged instance of a white woman who, after having borne children to a negro husband, had a second family to a white one in which some negro characteristics appeared, I have not been able to meet with any corroboration of this instance.

Spenser also gives instances with regard to dogs. He quotes a friend of his who was frequently a judge at agricultural shows, and therefore an authority, and who writes as follows: "A friend of mine had a valuable dachshund bitch which, most unfortunately, had a litter by a stray sheep dog. The next year he sent her on a visit to a pure dachshund dog, but the produce took quite as much after the first father as the second. The next year he sent her to another dachshund dog with the same result."

Another case: "A friend of mine in Devizes had a litter of puppies, unsought for, by a setter from a favourite pointer-bitch, and after this she never bred any true pointers, no matter what the paternity was."

"These evidences," says Spenser, "render the general conclusion incontestable. Coming from remote places, from those who have no theory to support, and who are, some of them, astonished by the unexpected phenomena, their agreement dissipates all doubt. We must take it as a fact that during gestation traits of constitution inherited from the father produce effects upon the constitution of the mother, and that these effects are transmitted by her to subsequent offspring."

Again, in the *Contemporary Review*, he wrote, "In an essay, to which this is a postscript, conclusions were drawn from a remarkable case of the horse and quagga there narrated, along with an analogous case observed amongst some pigs. These conclusions have since been confirmed.

He also quotes Professor Flint's *Text-Book of Human Physiology* as follows:—"A peculiar, and it seems to me an inexplicable fact, is that previous pregnancies have an influence upon offspring. This is well known to breeders of animals. If pure-blooded mares or bitches have once been covered by an inferior male, in subsequent fecundations the young are likely to partake of the character of the first male, even if they be afterwards bred with males of unimpeachable pedigree. What the mechanism of the influence of the first conception is it is impossible to say, but the fact is incontestable. The same influence is observable in the human subject. A woman may have by a second husband children who resemble a former husband, and this is particularly well marked in certain instances by the colour of the hair and eyes. A white woman who has had children by a negro may subsequently bear children to a white man, these children presenting some of the unmistakable peculiarities of the negro race."

Against these two experiments I will give two cases on the evidence of Cossar Ewart. They are as follows:—At the present day two of the purest breeds of dogs are the Scottish deerhound and the Dalmatian. A Scottish hound was put to a Dalmatian, and the result was a litter of seven pups. Later on she was put to another deerhound, and subsequently gave birth to five pups, all of which grew up to present *none* of the characteristics of the Dalmatian. A similar result was arrived at using a retriever dog and deerhound bitch. Again, a wire-haired fox terrier bitch mated with a white Pomeranian, and later on with a cross-bred Irish terrier. Finally she was bred with one of her own strain. Her three pups were in make and markings *pure terriers*.

I think now I have probably given sufficient evidence to enable you to weigh the matter, and perhaps to satisfy yourselves as to the truth or otherwise of the theory. Personally, I have very little doubt in the matter. To my mind the evidence of one who has seen a certain thing occur, provided he be a witness to be relied upon, is worth more than all the arguments which those who contend such a thing could not be possible, can bring forward. Here we have responsible persons, accepted as such by the highest authorities, who say definitely they have seen unmistakable examples of telegony. On the other hand, we have those who say, "We have never seen such things happen, even though the conditions were favourable, therefore we do not believe they do occur." Finally, I would remind you of the old saying, "An ounce of practice is worth a bushel of theory."

Naturally, now the question arises, why, if telegony be accepted as a fact, do we not find instances occurring every day? I think the explanation put forward by Spenser will answer it. The first refers to the fact that the quagga and the boar in the cases I have mentioned were wild, and therefore of pure breed. In addition, I may remind you that in the third case I have cited—that of the ass—the sire was also of a wild variety.

However, to continue, Spenser says, "In a mongrel the constitution from each source repeats itself as far as possible. Hence a conflict of tendencies to evolve two structures more or less unlike. These tendencies do not harmoniously conspire, but produce partly incongruous sets of organs, and evidently where the breed is one in which there are united the traits of various lines of ancestry, there results an organism so full of small incongruities of structure and action, that it has a much-diminished power of maintaining its own balance."

What he means to say is this: That given two animals, one pure and the other a mongrel, full of such conflicting tendencies as he mentioned, and if these

two be put successively, the pure one first and the mongrel later on, to a female, then the progeny of the second sire will be infected by the first, because the first has a stable structure, harmonised and consolidated by successive reproductions from generation to generation, while the other is full of all sorts of conflicting tendencies, which all contend one against the other, and so weaken the general structure; a good illustration of the fact that "a house divided against itself cannot stand."

Spenser continues: "In this" (he is talking about the quagga), "the stability of constitution must be such as no domestic animal can approach. Relatively stable as may have been the constitution of Lord Morton's horses as compared with the constitutions of ordinary horses, yet since Arab horses even in their native country have probably in successive conquests and migrations of tribes become more or less mixed, and since they have been subject to the conditions of domestic life, differing from the conditions of their original wild life, and since the English breed has undergone the perturbing influence of change from the climate of the East to that of the West, the organisation of the horse and mare in question could have nothing like the perfect balance produced in the quagga by a hundred centuries of co-operation. Hence the result, and hence at the same time the interpretation of the fact that analogous phenomena are not perceived among domestic animals or among ourselves to any great extent, since both have relatively mixed and generally extremely mixed constitutions, which as we see in ourselves have been made generation after generation, not by the formation of a mean between two parents, but by the jumbling of the traits of the one with the traits of the other until there can exist no such conspiring tendencies among the parts as cause repetition of combined details of structure in posterity."

Last of all, the problem is, how is this infection brought about? I have only been able to come across one explanation, and I confess I do not consider it worth very much. It is that the superfluous spermatozoa of the male may in some way or other become intermingled with the immature ova in the ovaries.

My objection is that in this case it would be highly probable that one act of fertilisation would bring about a succession of pregnancies, for each ovum becoming mixed, as it ripened, with the male element would consequently be fertilised and develop in the usual way. I think that a better explanation could be found if we looked to the intimate connection which the fœtus has with the mother. We know there is some means by which the fœtus and mother are in close communication, in evidence of which we have the transmission of certain diseases and also the changes which take place in the mother previous to the birth of the fœtus. Whether these latter changes are due to some psychic influence or to some internal secretion I am not prepared to say, but, if the latter, a way of communication is suggested directly.

Appointments.

Civil.

Forty, A. Alan, L.D.S. Eng., has been appointed Lecturer on Dental Anatomy and Physiology to Leeds University.

Goodall, Edwin, M.D., B.S. Lond., F.R.C.P. Lond., has been appointed Medical Superintendent of the Cardiff City Asylum.

Hodgson, Harold, M.B., B.S. Lond., has been appointed District and Workhouse Medical Officer of the Alresford Union.

Plumley, A. G. G., M.B. Lond., M.R.C.S., L.D.S. Eng., has been appointed Lecturer on Dental Surgery and Pathology to Leeds University.

Naval and Military.

Surgeon J. G. Watt, R.N., is promoted to be Staff-Surgeon.

Surgeon F. R. Featherstone, R.N., is appointed to the *Isis*.

Major J. V. Salvage, R.A.M.C., is promoted to be Lieutenant-Colonel.

Major E. S. Marder is placed on retired pay.

From the Gazette's Special Pathologist.

H. L., Manchester.—The section shows that this tumour is not an epithelioma, but a chronic inflammatory lesion of the lip. Over the affected area the epithelium is absent, and there is chronic large-celled hyperplasia extending rather more than one-eighth of an inch into the deeper tissues and there sharply demarcated. There is no sign of tubercle. The condition might be chronic "simple" inflammation, but it is certainly suggestive of a specific lesion.

G. M. J., Alton, Hants.—No tubercle bacilli have been found in this specimen, which is non-purulent in character.

G. M. J., Alton, Hants (No. 2).—This blood-stained specimen contained a little pus, but no tubercle bacilli were found.

I. R. A., Chadwell Heath.—This specimen contains a moderate number of tubercle bacilli.

PATHOLOGIST.

Papers by Guy's Men.

A Case of Intestinal Obstruction, with enormous Distension of the Cæcum. By Dr. E. C. Bevers.—*Lancet*, 4th August, 1906.

Chorea Gravidarum. By Herbert French, M.A., M.D. Oxon., M.R.C.P. Lond., and H. T. Hicks, F.R.C.S. Eng. (Illustrated.)—*Practitioner* for August, 1906.

The Ophthalmoscopic Evidence of General Vascular Disease.

CLINICAL LECTURE BY Mr. ORMOND.

Gentlemen,—We have now in the Eye wards a man, æt. 55, who is more or less a museum of pathological interest. He is a labourer, and has worked in London for thirty-five years. Until last month he had been employed as a concrete layer, in the service of the French Asphalte Company, his duties necessitating much shovelling of concrete in a stooping position. On April 4th last he noticed he could no longer see to do his work, and on that account he went to Moorfields Hospital and afterwards came to Guy's.

He is a somewhat spare man, fairly tall, with a stoop, and looks more than his age. On testing him, one finds his vision is only one-tenth of the normal, that is, he can only see at twenty feet the top letter of Snellen's type, and this is, of course, not sufficient for his work. His previous history is unimportant. He was in St. Bartholomew's Hospital twenty-six to twenty-eight years ago on account of a growth in his jaw, and about two inches of bone were removed from the left side, in consequence of which he has now a somewhat curious facial expression. He has had no trouble from then to the present time, with the exception that two or three years ago there was a large painful swelling at the back of his neck, which was diagnosed as a carbuncle.

He acknowledges that for the last two years there has been "something wrong" with his right eye, but he has not consulted anybody about it. If you look at him casually you will not notice anything unusual about him, except that he does not move about as freely as a person would who could see well. Beyond that, and slight dilatation of the pupils, there is nothing to be remarked. The left pupil reacts vigorously to accommodation, whereas if you cover that eye, you find the right one reacts only slightly, so slightly that we wondered whether there was any reaction at all. If you examined the patient more carefully with the ophthalmoscope you find some interesting facts.

The right eye looks normal from the front, and you can therefore argue that whatever may be the defect interfering with his sight, it is not due to his cornea or anything else in front of the iris. The defect must be behind the iris and also the lens. If you place the patient under a light in a dark room with his face in shadow, and look at him through the central hole of the ophthalmoscope, you will notice in the right eye that when the patient is looking downwards the pupil appears dark, but when he is looking upwards there is a brilliant red reflex. The red reflex is due to the reflection of the light from the chorio capillaris, which is situated in the anterior part of the choroid.

The choroid consists of layers of vessels which are of different sizes. The most anterior layer, or that which is nearest the retina, is the one from which the light is reflected, and the red colour is due to the mass of blood which is in the tiny capillaries composing that layer. The whole eye is transparent from the front almost to the posterior part, as far as this particular layer, therefore your light will travel through the eye until it gets almost to the back. In this patient, however, there must be something interfering with the light reaching, or returning, from the chorio capillaris. If you examine the eye a little more carefully from a distance of two or three inches, especially if the pupil is dilated, you will find on that darkened area distinct dark red lines, which you will easily recognise as blood-vessels. He has then, at the lower part of the right fundus, a very large area of opaque retina over which the blood-vessels can be seen; and that retina is detached retina, displaced nearer to you, because you can see it at a distance from the eye and focus it with a convex lens, whereas in the normal eye the rays of light returning from the retina are parallel and do not come to a focus. He has in the right eye a detachment which involves more than half of the retina, and reaches to the optic disc. His vision in this eye is reduced to the perception of large objects moving in the lower part of his field of vision. If you ask him to look straight forward, an object above him is not seen.

The left eye, however, is the one with which he probably has worked for the last two or three years, and it was the failure of vision in his left eye which caused him to seek advice. The red reflex in the left eye is good; it is bright and clear, uniformly so, in all parts of the field, whether he looks up or down or to the right or left. In examining this eye, you must be more expert with the ophthalmoscope, because you will find nothing abnormal until you see the fundus and focus it accurately. When you have done that you will see that the whole of the retina is streaked with blood, and

that the vessels are abnormal in appearance, the veins being very tortuous and dark, very full in appearance and broken in parts, similar to what is represented in this picture. The optic disc is indistinct with the exception of the outermost portion. Careful examination shows that the arteries appear as more or less white lines, with a very fine red streak in the middle. That is a very abnormal condition of the fundus, the normal fundus being represented in this picture.

What is the cause of the condition in this man's eye, and how has it been brought about?

As a rule, in health, the vessels in the retina are invisible; all you see when you look at a fundus is the column of blood in the vessels themselves; the vessel-wall is not visible, it being so thin and transparent that the light passes through it, but under certain pathological conditions the wall can be seen, and I want first of all to point out to you that with the aid of the ophthalmoscope we have a means of recognising disease of the arteries and veins.

If you look at the fundus oculi you notice that the blood column appears to be darker than the fundus around, the blood in the veins appearing darker than that in the arteries.

There is the drawing of a case in which that does not hold—a case which was under the care of Dr. Hale White, who subsequently published it in the *Lancet*. You will see that the vessels are of a paler colour than the fundus. The blood was at fault, and though the vessel-wall could not be seen, this change of colour showed that there was some alteration in the blood. This is, then, a point to be noticed—the blood may appear of a different colour; it may be darker or paler red; it may not even be red at all, but more of a straw colour. Another point is that the width of the blood-column may vary, and from this you will get an idea of the condition of the circulation. In some cases, such as leucocythæmia, you will often find that the vessels are extremely wide; in atrophy of the optic nerve, however, you will find the vessels very narrow and reduced almost to the appearance of fine threads. A third point would be the presence of the light streak. In most pictures of the fundus the arteries and veins are represented as red columns, and down the centre of the red columns there is generally a fine light line; that is to say, they show a double contour; the light streak is due to the reflection of the light from the wall of the blood-vessel. It is the same as you see on any bright tubular object. I was showing it in the ward the other day on a Winchester quart bottle.

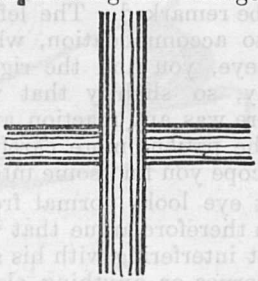
That double contour of the vessels is due, then, to the light from the ophthalmoscope reflected from the wall of the vessel. When the vessel is at right angles to the light, the light streak is better marked, whereas when the vessel is not at right angles it sometimes is invisible. The light reflex varies with alterations in the wall of the vessel, because in cases of thickening of the arteries the light streak is often much brighter; this has led to the statement which you will see in some books that the vessels look like "gold wire." The condition known as "gold wire artery" is simply a condition in which that light streak is well seen.

Another point to notice when examining the fundus for evidence of vascular disease is the tortuosity of the vessels. Cases have been shown from time to time at the Ophthalmological Society of tortuous retinal vessels in which the condition has had a congenital origin, but increased tortuosity of the retinal vessels is usually a sign of a pathological condition.

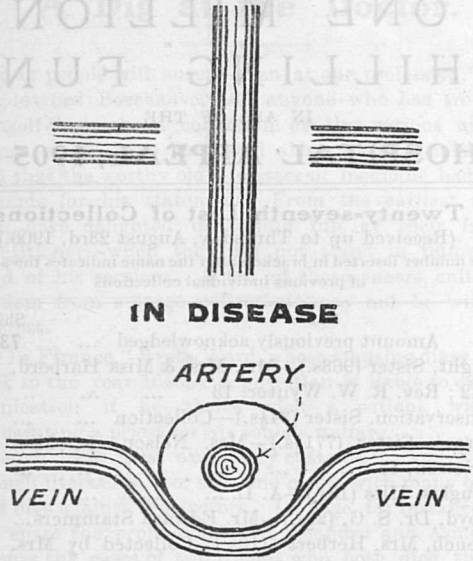
I have said already that the vessel-walls of the retina are clear, transparent, and invisible, but when diseased they sometimes become opaque; this opacity may be due to changes in or around the vessel walls (peri-angiectasis).

Still a more important point to notice is any interference of artery with vein where they cross each other. Ordinarily there is no evidence whatever of the one influencing the other, but in disease the vein sometimes appears to be cut quite in two by the artery.

Whatever the explanation may be—and the reason of this appearance is not quite clear—this condition when found in the retina is an indication that the arterial wall is much thicker than normal. The vein is supposed to be pressed down by the thickened artery, and where it goes under the artery it is invisible, so that you get an impression of discontinuity; it has been explained that the blood-column as it disappears downwards is lost sight of owing to the refractive power of the vessel-wall. Here is a drawing from the Ophthalmological Society's Transactions of a case showing this change.



IN HEALTH



Lastly, the presence of hæmorrhages or exudation in the fundus indicates that you are dealing with a pathological condition. We will now recapitulate the changes you may find in the fundus oculi when you suspect general vascular disease. They are: an alteration in the width of the vessels, in the light reflex, in the colour of the blood-columns, in the tortuosity of the vessels, opacities either in or around the vessel-walls, alterations in the appearances seen where the vessels cross, and the occurrence of hæmorrhage or exudation.

Our patient shows all these changes very well. What is the pathology of this condition? The diagnosis usually made in cases presenting this appearance is thrombosis of the central retinal vein, but recent investigations make it quite clear that the change is by no means limited to the veins, but is really an angio sclerosis of the retinal vessels. There is marked thickening of the walls, with narrowing of the lumina, due to a proliferation of the intima.

Changes also are found around the veins as well as within them, but it is difficult to say whether these are primary or secondary.

Localised bulgings into the channel of the vessels occur, these swellings being due to proliferation of the endothelium, and they contain newly-formed elastic tissue and proliferated sub-endothelial tissue; these thickenings are localised, and where present tend to strengthen the vessel-walls, whilst in other places the walls may be less thick, and there it is probable the hæmorrhages occur.

The pathological changes suggest some general vascular alteration, and we might expect to find evidence of similar changes in the other eye and in the body generally.

It is impossible in this case to say much with regard to the vascular changes in the right eye, as the presence of the detached retina nullifies the drawing of conclusions from the changes in those vessels, but on examining the undetached portions of the retina it is noticed that the arteries have opaque walls and a well-marked light reflex. With regard to the patient's general vascular condition, Dr. Fawcett, who has seen him for me, thinks that he undoubtedly shows signs of arterio sclerosis in other parts of his body. The heart is a little enlarged, and the second sound is altered. The chest is emphysematous, and the radial artery undoubtedly tortuous and also thickened. The urine was tested, the whole quantity passed in twenty-four hours being taken, but beyond its being of a low specific gravity nothing unusual was found. So, although the general medical signs of this disease are not very well marked, still, such signs as are present undoubtedly lead to the conclusion that this man has some change in his other vessels.

What are the causes which lead to this condition of angio sclerosis, and can we recognise the condition earlier in the fundus oculi than in other parts of the body?

The causes leading to angiosclerosis are conditions producing high arterial tension in the peripheral circulation such as you find associated with heart disease or renal disease, etc.

Age has a very marked influence on the frequency with which this condition of so-called thrombosis of the centre retinal vein is found, most of the patients being over forty years of age; and Ammann has called attention to the fact that very frequently those suffering from thrombosis of the central vein are persons accustomed to much toil, especially in the stooping position. Our patient, you will remember, had hard shovelling work for years in laying the concrete bed upon which the asphalte is put. He has hardly ceased to work in this way for thirty-five years, he tells me, and has toiled from eight to ten hours a day.

There may also be some truth in what Osler has stated, that in some men this deterioration of vessels is due to inherent defect in the material, that the vessels are made of defective "rubber." The condition is much commoner in America and England than in hot eastern

countries where life is lived more leisurely. Men are more frequently attacked than women, as you would expect.

Could we have warned this man years ago of the probable result of his laborious work? Does the ophthalmoscope aid us in making an early diagnosis?

The vision in the right eye failed, gradually and insidiously no doubt, two or three years ago, but the detachment of the retina may, if we accept Rahlmann's theory, be due to the vascular changes present in that eye. Arterio sclerosis is not, however, a generally accepted cause of retinal detachment. With regard to the existence of changes in the left eye previous to the rapid failure of sight which this man noticed on April 4th, we may say that considerable thickening of the arteries and veins may be found microscopically, which have not in life given rise to any ophthalmoscopic change, and it is not usual for these patients to notice any premonitory signs, although sometimes transient attacks of blindness are recounted. I should say, however, that physicians (who would probably be consulted earlier than ophthalmic surgeons by patients on account of other manifestations of the disease) could frequently obtain much valuable information by a careful ophthalmoscopic examination.

The prognosis in this case is bad, both with regard to vision and life.

Secondary glaucoma may, and often does, supervene in these cases, and is intractable. The condition will probably get worse, even if glaucoma does not supervene, as it is impossible to improve the condition of the vessels before the vision becomes hopelessly ruined. The prognosis is not always so sombre, but depends on the extent to which the disease has progressed.

One cannot argue that the cerebral circulation must be also diseased because the retinal circulation is, although the retina is part of the brain. Nevertheless, it is not improbable that his cerebral vessels are diseased. The treatment consists in removing the cause, and by means of drugs, etc., reducing the increased peripheral pressure.

If the cause is as we suspect—overstrain, due to his work, then the cause has been effectually removed, because the man can no longer see to do his work. He is taking iodide of potassium in ten-grain doses, which will be increased gradually. No local treatment is of any avail, but the intra-ocular tension must be carefully watched.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-seventh List of Collections.

(Received up to Thursday, August 23rd, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections

Name.	Shillings.
Amount previously acknowledged ...	73,621½
Bright, Sister (963s.)—Mr., Mrs. & Miss Harbord, 42; Rev. R. W. Wynter, 13	55
Conservation, Sister (34½s.)—Collection	10
Dorcas, Sister (771½s.)—Mrs. Nelson, 5; Miss Nelson, 15	20
Douglas, Miss (16s.)—A. L.	5
Floyd, Dr. S. G. (2½s.)—Mr. Edward Stammers...	11
French, Mrs. Herbert (110s.)—Collected by Mrs. Touzel	30
Henderson, H. J. (699½s.)—"Babs"	21
Lindsay, Dr. W. J. (20s.)—Collection	5
Naaman, Sister (142s.)—Mr. James Potter ..	5
Pearson, A.	42
Stoddart, Miss M. I.—Collection	7
Thornely, Capt. M. H., I.M.S.	21
Wilson, Dr. W. (42s.)—Mr. & Mrs. Young, 20; Mrs. Godfrey, 5; The Misses Godfrey, 2; Miss France, 1; Miss Taber, 1; Miss A. Footman, 1; The Misses Welch, 3; F. E. M., 1; A. J. M., 2½; M. E. M., 2½; Mr. Hanson, 1; Miss Heagerty, 1; Miss A. Jones, 1; Mr. Sutton, 2; Mrs. Sutton, 1; Mr. Clews, 1; Miss A. Roberts, 1	47
	73,900½
Further collections from sources outside the Hospital	11
TOTAL (up to 23rd inst.)	73,911½

Change of Address.

Dr. W. L. Chubb, from Earlside, South Farnborough, to 1, The Ridge, Farnborough, Hants.

Lieut. Brooke Churchill, R.A.M.C., Cawnpore Club, India.

Mr. T. J. Green, L.D.S. Eng., from 143, Leytonstone Road, Stratford, to 49, Cranbrook Road, Ilford, Essex.

Mr. W. Sampson Handley, from 51, Devonshire Street, Portland Place, W., to 77, Wimpole Street, W.

Dr. Arnold Leeming, from Guy's Hospital, to Holly Lodge, Friar Street, Sudbury, Suffolk.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

A Dig at the Doctor.

"Some people will sneer—even at our profession," said the learned Boerhaave, and anyone who has troubled himself to make a collection of the various unkind things which have been said about medical men, will find that the worthy old professor of medicine had good grounds for his statement. From the earliest times men have delighted in poking fun at their family practitioner—when they did not stand in immediate need of his services. A few of these sneers, culled at random from a large collection, may not be without interest.

"In Ffrance," wrote Ward, whose amusing diary dates back to the year 1648, "a physitian is liable to excommunication if he thrice visit a patient without acquainting a priest for his soule's welfare. . . . The Ffrench have most exemplary customs." And it is in French literature, too, that one meets with many of the best digs against the doctors. Le Sage, for instance, did not spare the profession. His Leandro and Asmodeus discuss the cases of two friends who both died, the one because "he took what his doctor ordered him, and the other because he refused to take anything at all." "Very embarrassing," remarks Leandro, "what on earth are we to do?". "Ah, I wish I could tell you," said the Cripple. "You may find some good remedies, perhaps, but I'm hanged if you'll light on a good doctor." Much more scathing is the anonymous author who thus describes French hospital practice in the early part of the last century:—

> Là, le long de ces lits où gémit le malheur
> Victime des secours plus que de la douleur,
> L'ignorance en courant fait sa ronde homicide
> L'indifférence observe et le hazard décide.

Equally venomous was Molière, whose writings abound with libellous references to the profession. Take "L'Amour Medicin." In the first scene of the second act of this amusing play, Lisette and Dr. Sganarelle have the following conversation:—

Lisette: "What do you mean, sir, by having four doctors for your daughter? Is not one man-slayer enough for one person?"

Dr. S.: "Quiet, you hussy. Four opinions are better than one."

Lisette: "Why not let the poor child die in peace?"

Dr. S.: "Do you really think we will worry her to death?"

Lisette: "Of course. The other day a friend of mine, who was thought to have died of a fever, died on the contrary of four doctors and two apothecaries."

Dr. S.: "Hush, my dear. You will offend the gentlemen in attendance."

Lisette: "Well, sir, our cat has just recovered from a fall out of the window, and she treated herself. Thank God we have no cat doctors here, else they would have bled and purged the poor thing's life out of her for a certainty."

And later on Dr. Mactolon gives his parting injunctions. "You must not be too certain, sir," he remarks, "that your daughter will recover. Still, if she die, you will have done what ought to be done, and you will have the consolation of knowing that the dear child's death has been properly ordered—in fact, that all the usual forms have been complied with." To which remark Dr. Balin adds his appreciatory comment by observing, in a stage whisper, "Ah, how much better is it to die in a scientific manner than to make a recovery by flying in the face of all received forms."

Again, in "M. de Pourceaugnac," Eraste and the Apothecary discuss their respective medical attendants. "My dear sir," says the Apothecary, "it is a positive pleasure to be that man's patient. For me, I would rather die under his treatment than recover by anybody else's medicines, for whatever may be the result this is certain, he is always in order. All with him is secundum artem." "What a great consolation for the deceased," replies Eraste, sarcastically, but his friend takes the remark seriously. "Assuredly," he says, "it is delightful to die in such a regular manner. Moreover, he is not the man to make a long business of it. He is expeditious—yes, expeditious. He likes despatch where his patients are concerned, and if we must die, he does his best that it shall not be of any lingering illness." While one of the cruellest digs is that which the witty Rabelais gave on his death-bed when his doctor advised a final consultation. "My dear doctor, do allow me to die a natural death!"

In classical literature one finds numerous hits at the profession. The Greek wits, for instance, with Aristophanes at their head, sometimes hit very hard. The following two translations, by Lord Neaves, of Greek witticisms at our expense, will bear repetition. The first is by an anonymous author, and runs as follows:—

> Damon, who plied the Undertaker's trade,
> With Dr. Crateas an agreement made,
> What linens Damon from the dead could seize,
> He to the doctor sent for bandages,
> While the good doctor, here no promise breaker,
> Sent all his patients to the undertaker.

The second, which is usually fathered upon Agathias, is more spiteful.

> A thriving doctor sent his son to school
> To gain some knowledge, should he prove no fool;
> But took the lad away with little warning
> On finding out the lesson he was learning,—
> How great Pelides' wrath, in Homer's rhyme,
> Sent many sobls to Hades ere their time.
> "No need for this, my boy should hither come;
> That lesson he can better learn at home.
> For I myself now, I make bold to say,
> Send many souls to Hades ere their day,
> Nor e'er find want of grammar stop my way."

The third is by Ammianus, who is good enough to declare that he might after all be in error.

> Nicias, a doctor and musician,
> Lies under very foul suspicion.
> He sings, and without any shame
> He murders all the finest music;
> Does he prescribe? Our fate's the same
> If he shall e'er find me or you sick.

In English literature one lights on many of these digs, but they occur mainly in the writings of the lesser fry. The greater men, who saw things in their proper perspective, have almost uniformly treated the profession with courtesy, and it would be an easy task to compile a series of appreciatory notices of the doctor from the works of the great English writers of the past. Milton, notwithstanding the fact that he probably owed his affliction to unskilful treatment, speaks everywhere with respect of the medical men with whom he came into contact. Keats has drawn "Appolonius, my trusty seer and guide" (said by some critics to be a pen picture of Sir Astley Cooper), as one of those who—

> Love their fellows even to the death,
> And feel the giant agony of the world,
> And more, like slaves of poor humanity,
> Labour for mortal good.

It is true Shakespeare hits occasionally, but his digs are always in playful good humour, illustrative more of the generally prevailing impression than of his own views. Beaumont and Fletcher, who produced Drs. Paulo, Corax, and Richardetti, treated their medical characters with more or less good feeling. Shelley, Coleridge, Byron, Moore, and indeed most of the others who have attempted to deal with doctors, are supercilious enough, but rarely spiteful. Chaucer's "Doctour of Phisik—the vary parfit praktisour," was not only a fine study, but was a whole-hearted appreciation of the profession which few later writers have surpassed. It is only when we come to the lesser lights that the scurrilousness begins, and their digs are so biting and so numerous that it is only possible to give a few of the less well-known ones. In Cobb's "Doctor," a splenetic little play, Dr. Bilioso appears talking to his surgery attendant, Perez:—

Dr. B.: What a cursed place for a physician to live in. All the villagers a d——d set of vulgar, healthy dogs—never have the pleasure of seeing a meagre, gentleman-like fellow within a mile of the place. How comfortable must it be to live in Constantinople where the plague rages all the year round. Well, Perez, anybody ill this morning?

Perez (sighing): Alas, master, all are cursedly well.

Dr. B.: Aye, and likely to remain so as long as this plaguy fair weather lasts. I, the doctor, am the only sick man in the parish.

Perez: Yes, your worship seems stuck like a medical scarecrow to frighten away disease.

Dr. B.: More like a lightning conductor, to attract it. How about that foreigner? Not well yet, I hope?

Perez: Yes, they say the apothecary was sent for last night.

Dr. B. (angrily): What, send for my enemy, the villain? A man of honour would sooner have died under his physician's hands.

Perez: An' he took some of the quack's medicine.

Dr. B.: Oh, curse them. I hate all violent medicines, they make an end to the business too soon. They all kill or cure, and in either way one loses the patients.

Perez: An' so the 'pothecary.

Dr. B.: Oh, rot him. I'll trounce the villain. If a doctor's patients are permitted to slip through his fingers, and get well by stealth, there's an end to all law and justice.

The famous Dr. Isaac Cheetham's habit of making enemies led to the following neat rhymes at the doctor's expense:—

> When those who health and candour prize
> Apply to me, I treat 'em.
> With baneful drugs and noxious lies
> In every case I cheat 'em.

and again:

> Consistent Cheetham still supplies,
> Whate'er the diagnosis,
> Physic and Falsehood, Drugs and Lies,
> In most tremendous doses.
> But Patients and the Public, loath
> To follow humbugs hollow,
> Reject his noxious nostrums both
> As more than they can swallow.

It was Cheetham, too, who led Taylor to give his often-quoted definition of a doctor as "a physician is one who writes prescriptions while nature cures the disease"; which, after all, is a trifle better than Edward Dekker's declaration that "the worst prognostic sign in any disease is the attendance of a licensed drug mixer."

Crabbe, probably soured by his experiences as apprentice to an inhuman country practitioner, has left a picture of the parish doctor of his time which is unfortunately not such a caricature as it appears to be on first sight.

> A figure enters, quaintly neat,
> All pride and bus'ness, bustle and conceit.
> He bids the gazing throng around him fly,
> And carries fate and physic in his eye.
> A potent man, long versed in human ills,
> Who first insults the victim whom he kills;
> Whose murd'rous hand a drowsy Bench protect,
> And whose most tender mercy is neglect.
> Paid by the parish for attendance here,
> He wears contempt upon his sapient sneer.
> In haste he seeks the bed where misery lies,
> Impatience marked in his averted eyes,
> And some habitual queries hurried o'er,
> Without reply he rushes to the door.

Under such circumstances can one wonder that the hits in Lytton's "Not so Bad as We Seem" were immensely popular when that mediocre play was staged? Here is one of them:

Wilmot: Servant, ladies: Sir Geoffrey, your servant. I could not refuse Mr. Softhead's request to enquire after your health.

Sir G.: I thank your lordship, but when my health wants enquiring after I send for the doctor.

Wilmot: Is it possible that you can do anything so dangerous and rash?

Sir G.: How—what the—

Wilmot: Send for the very man who has an interes in your being ill?

Sir G.: That's true. I did not think the man had so much sense in him.

There were many other contemporary hits, such as Porson's "The Devil's Walk," with its stanza,

> He saw a 'Pothecary on a white horse,
> Ride by on his vocation.
> "Ah," said the Devil, "there's my old friend,
> Death in the Revelation."

and the many ballads and fly-sheets about the then current controversies between herbalists and allopaths. One of the most virulent of these is entitled "Death and his Ministers," and relates how Death, wearied of his labours, resolved to delegate his functions to two ministers of state, and received applications from Pestilence, Famine, War, Wreckers, and various other agents, but rejected them all in favour of

> The surgeons and physicians of the day.
> "Come forth," cries Death, "the spectre-king prefers
> Brodie and Watson for his ministers."

Meredith, who has seen deeply and keenly into many of the questions in which medical men have an interest, is responsible for one of the most cuttingly satirical digs that one can light upon, for he makes poor Jerry the Juggler exclaim on his death-bed :—

> It's past parsons to console me—
> No, nor doctors fetch for me:
> I can die without my bolus—
> Two of a trade, lass, never agree.

But one can pardon that, in view of the good things he has said of the profession in other poems, and of the picture of the ideal physician he drew in "Melampus":—

> Melampus dwelt among men, physician and sage:
> He served them, loving them, healing them, sick or maimed,
> Or them that frenzied in some delirious rage
> Outran the measure, his juice of the woods reclaimed.
> He played on men as his master Phœbus on strings,
> Melodious as a God did he drive and check,
> Through love exceeding a simple love of the things
> That glide in grasses or rubble in wooded wreck.

It is Meredith, too, who voices the thoughts that many of us must have felt in our ward work, in contemplating the misery that doctors only see in its entirety, though poets sing of it. In "Martin's Puzzle" occurs the best illustration of this philosophic mood in the lines :—

> Here's a creature made carefully—carefully made,
> Put together with craft and then stamped on; and why?
> The answer seems nowhere; it's discord that's played,
> The sky's a blue disc—an implacable sky.

But that is a subject which scarcely concerns the present article, and may be left for a future occasion.

F. W. B.

Reviews.

The price of books submitted for review should in every case be stated.

A Manual of Physiology, with Practical Exercises. By G. N. Stewart. Fifth edition, University Series. (Bailliére, Tindall & Cox). pp. 911. Price 21s.

This book is one of the familiar University Series of which Rose & Carless' Surgery is perhaps the best-known volume. The last edition was published in 1900, so that very considerable alterations have been made in the text; indeed, it has been found necessary to re-write a great part of the book, and we must especially draw attention to the new matter in the chapters on Blood, Digestion, and the Central Nervous System. The section on Blood is interesting in presenting the most recent work on coagulation; the broad principles of clotting remain the same as before, but a great deal of new matter about Fibrin Ferment demonstrates a considerable increase in our knowledge of the details.

In discussing the origin of the cardiac rhythm, the author gives both "nervous" and "muscular" views, but contrary to the usual opinion in this country, and, in our opinion, on insufficient data, inclines more to the former. The section on the Digestive System is brought well up to date, and the section on the Central Nervous System is amply illustrated with excellent diagrams; in fact, the diagrams all through the book are very good.

The text is so full of facts and ideas that to prevent the volume becoming too bulky much important matter has been printed in small type; this is much to be deplored from the student's point of view, as much reading is a weariness to the flesh, and small print does not make it less so. To avoid this difficulty the author had been much better advised to omit altogether the practical part of the work. It is entirely unnecessary to have both text and practical in the same volume, and in our opinion a bad principle; the book is too bulky to be conveniently carried to the laboratory or to be used when there.

But for these failings the book is worthy of great praise, for though the matter is not all original it is well set forth in a clear and pleasant manner.

Marriages.

CHEYNEY—STUDDERT.—On August 22nd, at St. Mary's Cathedral, Limerick, by the Very Rev. Dean O'Brien, George Hammond Cheyney, M.R.C.S., L.R.C.P., son of the late George Jacob and Mrs. Cheyney, Ware, Herts, to Gertrude Eveline, third daughter of Mr. and Mrs. Jonas Studdert, Kilkee, Co. Clare.

FORSYTH—NEALE.—On 24th July, at Christ Church, Ealing, W., by the Rev. P. H. Bown, M.A., late Acting Chaplain to Guy's Hospital, assisted by the Rev. W. Templeton King, B.D., Vicar, David Forsyth, son of Alex. Forsyth, M.D., to Kate, daughter of Frederick Neale, Esq.

HALL-GOLDSMITH.—On 22nd August, at St. Mary's Church, Hayling Island, by Rev. Charles Clarke, M.A., R. W. Basil Hall, Surgeon, Royal Navy, of Royal Naval Hospital, Haslar, son of Inspector of Machinery, Robert Hall, R.N. (retired), to Gertrude Grace, only daughter of Engineer-Captain H. C. Goldsmith, R.N. (retired), of Fern Cottage, Hayling Island.

O'BRIEN—CARTER.—On August 1st, at St. Mary Magdalen Church, Brockley, S.E., by the Rev. Father Spranklin, assisted by the Rev. Father O'Neil, Arthur Boniface O'Brien, of Christchurch, New Zealand, to Mary Catharine, the eldest daughter of Dr. and Mrs. Carter, St. John's, S.E.

Death.

STATHARD.—On July 21st, at Thorncliffe, Palatine, Didsbury, Manchester, William Jebson Stathard, L.R.C.P., M.R.C.S., aged 62 years.

In Lighter Vein.

WHEN THE SLEEPER SLEEPS.

THE STAFF BETWEEN THE SHEETS.

In view of the awakened interest in the subject of sleep and dreams, the following all-too-brief glimpses into the nocturnal habits and experiences of some of our own men of genius may be of interest to those of our readers who are able to rise above considerations of merely clinical interest.

Dr. P–tt, we are informed, never retires to bed without weighing himself with scrupulous care, having first divested himself of all ordinary clothing worn in the day-time and assumed a simple garment of texture that varies with the time of year. He rarely experiences any difficulty in falling off to sleep—but if there is any slight inconvenience he counts his corpuscles as they pass through a special capillary vessel adapted for the purpose, until through sheer weariness oblivion supervenes. He never dreams.

T–mmy H––ks, whose little life is also further rounded by a sleep, is to be more imagined than described peevishly tossing about in pink pyjamas, in a cot of generous capacity.

"Think that case in Queen is probably a pyosalpinx. Wish Braxton would stop barking."

(Jumps out of bed and leans out of window.)

"Silence in the kennels. Down, Braxton! Down, I say."

(Braxton downs with the usual result, but still growls ominously. T–mmy brandishes cephalotribe from window.)

"I'll smash *you*."

(Dead silence. T–mmy returns to bed.)

"S'welp me, ain't it hot! Think that case in Queen is probably a pyometra. Or perhaps its a bull-pup—or a—

(Sleeps, and is transported to an insignificant trout stream somewhere in the West of England. Is poaching with his old pal, Sir Frederick, who looks uncommonly like Braxton, back view. Large trout presenting at bottom of deep pool. T–mmy makes fruitless efforts to coax it from under a boulder. Trout not having any. T–mmy flies into violent passion. Tries to perforate. Fails. Runs off for a shot gun. Brilliant idea on way back. Of course that case in Queen is a Cæsarian. Trout still there. Fires gun. Trout changes to Braxton and comes to surface with wild yelp, as T–mmy wakes with a start. More business from window. Finds on settling back in bed that he has really come to the conclusion that that case in Queen is medical. Another instance of the subliminal consciousness working out advanced problems in the mind of the man of genius.)

Dr Fr–nch, wearing a linen night-shirt of simple pattern, can be heard any night purring gently to himself—

"Things *in* the bed. Things *on* the bed, and things *under* the bed."*

He falls to sleep with a very slight snore, and sleeps an entirely dreamless sleep untroubled by any "vain imaginings." In the morning rises *punctually* at eight, and while parting his hair congratulates himself on the excellent condition of his Nissl's granules as compared with their condition previous to rest.

Mr. W–lly L–ne, somewhat restless and wearing light-blue pyjamas, drowsily:—

"What a dreadful lot of weather we're having. Frightfully congested night. Don't you think so? All this pigmentation, too. You see? Can only mean one thing, can it? You see? Let's try and get some of it off with a brush."

(Sleeps, and is confronted with a huge abdomen, which "crackles" ominously on generous palpation.)

"Let's look inside, shall we? Sure to be all thickened and adherent, isn't it? The poor thing's had a lot of misery. They used to use a knife for these incisions. So much simpler with a fork. That's curious, isn't it?—the colon's gone. I *thought* I remembered her umbilicus. Shall we sew it up? Had a *lot* of misery, hasn't she?"

Dr. H–rr–cks, in purple peek-a-boo pyjamas, almost asleep; murmurs to himself, "Ah'm quaht all raht, but ah maht have farb——(falls to sleep not a minute too soon and dreams that—

Suppressed by Censor.

GLOBUS HYSTERICUS.

* Adapted from Mr. Macalister's famous work, "The few Jokes I have Made."

Dental Prescriptions.

Dental Clinical Lecture by Mr. W. A. Maggs.
Delivered June 7th, 1906.

Gentlemen,—Dental surgeons are often asked by patients for prescriptions for applications for the gums, and for mouth-washes. Perhaps the most common requests are for "something to strengthen the gums" and for a mouth-wash—the latter presumably in many instances being for no particular purpose.

Before giving a prescription the first consideration is to determine what line of treatment is necessary if any is indicated.

A localised inflammation of the gums, gingivitis, due to septic teeth or roots, or to the presence of tartar, is a common affection, and the removal of the teeth or tartar is alone required.

A chronic form of general inflammation of the gums, shown by tenderness and liability to bleed, is sometimes due to disuse of the tooth-brush. The gums, soft, congested and wanting in tone, are spoken of as being "flabby" or "spongy." Gentle massage with the finger, or a soft towel, by acting as a local stimulant to the nutrition of the part, is best, and a moderately stiff tooth-brush with some simple tooth powder should be used two or three times a day. By such means a firmer and more healthy state of the gums will soon be brought about.

A similar form of chronic inflammation may be due to a denture being worn continuously, night and day; in many cases the shape of the artificial plate is well marked out on the palate of the patient. The mucous membrane of the mouth is normally intended to be worn away by the muscular movements of the tongue, and by food, and the inflamed condition will rapidly improve if the denture be not worn during the night.

Inflammation of the gums accompanies the condition known as pyorrhœa alveolaris—chronic inflammation of the alveolo-dental periosteum—but this disease, which requiries special treatment, such as careful scaling, syringing with hydrogen peroxide and other remedies, does not come within the scope of this lecture.

The prolonged administration of certain metallic salts, particularly of mercury, lead and copper, sets up general gingivitis, and when this condition is present the discontinuance of the drug is indicated. In delicate patients, and especially in those suffering from rheumatism and anæmia, a chronic form of inflammation unaccompanied by local cause is sometimes seen. Such patients are benefited by the application of astringents. Astringents (astringo, I draw together) are substances which cause the contraction of the tissues.

I.—Local Vegetable Astringents.

Tannic acid. $C_{14}H_{10}O_9$	An acid obtained from gall-nuts, which are excrescences found on the small twigs of *Quercus Infectoria*, Asia Minor. Gall-nuts contain about 35 per cent. of tannic acid.
Gallic acid. $H_3C_7H_3O_5$	An acid also obtained from gall-nuts, which contain about 5 per cent. of gallic acid.
Catechu.	An extract of the leaves and young shoots of *Uncaria Gambier*, Singapore. Contains from 48 per cent. to 54 per cent. tannic acid.
Rhatany root.	The dried root of *Urameria triaudra*, Peru. It contains about 40 per cent. tannic acid, and some urameric acid, about which little is known.
Kino.	The inspissated juice of the *Pterocarpus Marsupium*, Malabar. It contains a species of tannin, and another astringent principle, found also in catechu, called catechin.
Myrrh.	A gum-resin obtained from the stem of *Balsamodendron Myrrhæ*, and other species, South-Eastern Arabia and Somaliland. It contains from 40 per cent. to 65 per cent. of gum, soluble in water; the remainder, consisting of resin, is mostly soluble in alcohol. Myrrh forms an emulsion in water.

The best-known vegetable astringents are enumerated above, and all of them being non-poisonous and soluble in varying proportions of rectified spirit and of water, with the exception of gallic acid, which is now regarded as useless, are very useful to the dental surgeon. These astringents owe their properties, for the most part, to the quantity of tannic acid which they contain, and on this account tannic acid itself is most commonly used. "Tannin exerts little or no appreciable action on the unbroken skin, but on mucous membranes, or on raw or bleeding surfaces its astringent effects are immediate and decided. When applied to a mucous membrane it seems to produce a certain degree of coagulation in the cells; it precipitates the albumin of the secretions and diminishes their amount."—Hale White.

The tannin, in powder, may be rubbed on the gums with the finger night and morning; or glycerine of tannic acid may be used in a similar manner, or diluted with water. Glycerine of tannic acid contains one part in six of tannin by weight, or one in four and a half by measure.

"Gallic acid does not precipitate albumin, and has, therefore, no local styptic or astringent action; neither does it tan leather. Its action is simply that of a weak organic acid, and hence it has no special therapeutical value of any kind."—Hale White. Catechu, kino and rhatany contain large percentages of tannic acid, and are, therefore, of about equal value from a therapeutic point of view, but kino solutions undergo gelatinisation, and on this account are objectionable.

Rhatany, with glycerine of boric acid (boric acid 6, glycerine 9)—more powerful than boric acid alone—makes an excellent mouth-wash.

℞ Glycerini Acidi Borici.
Tincturæ Urameriæ.
Aquæ Cologniensis add ℥ gs.
Spiritum Rectificatum ad ℥iv.
m. ft. Collutorium Signetur.
"The astringent mouth-wash."

One teaspoonful to be used in a wine-glass of warm water night and morning. The fluid should be held in the mouth for a few minutes, and made to bathe the gums.

Myrrh has feeble astringent action, and is not much recommended by the profession. The public, however, seems to regard it as of some value, especially in conjunction with borax. The composition of tincture of myrrh and borax, as given in *Squire's Pocket Companion to the British Pharmacopœia, 1904*, is "Myrrh, 1; Eau de Cologne, 16; Borax, 1; Water, 3; Syrup, 3."

II.—Local Mineral Astringents.

Alum $Al_2(SO_4)3,U_2SO_424H_2O$	Sulphate of Aluminium and Potassium	Solids gr. x.
$Al_2(SO_4)3,(NH_4)SO_4,24H_2O$	Sulphate of Aluminium and Ammonium	
Borax $Na_2B_4O_7,10H_2O$	Biborate of Sodium	Tabloids gr. v.
Copper Sulphate. $CmSO_4,5H_2O$	Cupric Sulphate.	
Zinc Acetate, Corbonate, Chloride and Sulphate.		Tabloids.

In considering the local mineral astringents here mentioned it may be said that alum and borax are popular household remedies, and if not very powerful are at least harmless. Either can be used in the strength of 10 grs. to the ounce of water. Further, alum in powder can be rubbed into the gums, and so can borax, or the latter can be used in combination with myrrh as given above in the formula of Squire. It is not advisable to prescribe cupric sulphate, or any salt of zinc, on account of the poisonous properties of these drugs.

Mouth-washes (collutoria) may be employed as (1) astringents, (2) antiseptics, (3) deodorants, (4) sedatives, (5) antacids.

In considering the value of mouth-washes, we must first ask ourselves for what purposes they may be required, as placebos are unworthy of us.

(1) *Astringents.*—An astringent mouth-wash may be ordered as given above for the gums; or some tannic acid, powdered myrrh or cinchona bark may be added to the tooth powder ordinarily used by the patient.

(2) *Antiseptics* (αντι, against σηπτικος putrefying).—Antiseptics are remedies which prevent or arrest the growth of micro-organisms, or bacteria. Their value in the mouth has been much called into question of late years. They can never take the place of thorough cleansing of the teeth, but are useful adjuncts, provided they are not too strong, and are non-poisonous, and non-caustic.

The antiseptic agents in use at the present time are very numerous, and are constantly being increased.

Some local antiseptics and strengths for use in the mouth:—

Benzoic acid	1 in 500	(gr. j. ad ʒj.), Tabloids gr. v.
Borax	1 „ 32	(gr. xv. „ ʒj.), „ gr. v.
Boric acid	1 „ 32	(gr. xv. „ ʒj.), Tabloids gr. vj. to xv.
Carbolic acid (phenol)	1 „ 100	(gr. v. ad ʒj.), Soloids gr. v., xx., xl.
Creosote	1 „ 100	(♏. v. ad ʒj.)
*Chinosol	1 „ 100	(gr. v. „ ʒj.), Soloids gr. 1·75, 8·75
Formic-Aldehyde	1 „ 1000.	
*Glyco-Thymoline	1 „ 5.	
Hydrogen peroxide	5 vols. in 100.	
Lysol (a solution, in neutral soap, of tar oils 47%)	1 in 100	(♏. v. ad ʒj.)
Potassium Chlorate	1 vol. in 50	(gr. x. ad ʒj.) Tabloids gr. v., xx.
Potassium or Sodium permanganate	1 „ 100	(gr. v. ad ʒj.) Soloids gr. j., v.
*Trichloracetic acid	1 „ 100	(gr. v. ad ʒj.)
Zinc chloride	1 „ 250	(gr. ij.-iij. ad ʒj.) Soloids gr. j. v.
Zinc sulphate	1 „ 250	(gr. ij.-iij. ad ʒj.) Soloids gr. j., x.
†Mercury Perchloride	1 „ 2000	(gr. ¼ in ʒj.) Soloids gr. 1·75, 1 to 8oz. = 1 in 2000.

All the antiseptics enumerated, with the exception of corrosive sublimate, may be safely used; their selection must depend upon the judgment and experience of the practitioner.

Carbolic acid and formic aldehyde rank highest for the after-treatment of extraction wounds; boric acid, borax, and chlorate of potassium for the treatment of suppuration of the antrum; hydrogen, or sodium peroxide, and glyco-thymoline for the treatment of pyorrhœa alveolaris; menthol and thymol are pleasant medicaments which can be added to any other antiseptic; creosote, iodoform and trichloracetic acid are not suitable for mouth-washes, but possess other dental uses; chinosol and lysol are chiefly used for the hands and instruments of the dentist.

A combination of carbolic acid with chlorate of potassium has an antiseptic and sedative action, and gives much comfort after a severe extraction, or when an alveolar abscess is present. This compound should be ordered in such strength that upon the addition of an equal quantity of hot water the mouth-wash will be rendered tepid.

℞ ‡Glycerini acidi carbolici ... ... ʒvj.
Potassii chloratis ... ... ʒiij.
Aquæ cologniensis ... ... ʒgs.
Aquam ad ʒviij. m.ft. collutorium signetur.

"The antiseptic mouth-wash, one tablespoonful to be used with an equal quantity of hot water every four hours."

The use of tabloids and soloids is becoming more and more popular, and whilst their convenience is undeniable, yet a prescription possesses the advantage that other needful drugs may be incorporated. It may be mentioned that the soloids of chinosol, biniodide and perchloride of mercury, paraform, and phenol, are most convenient for sterilizing one's hands and instruments.

*Not official. †Poisonous. Unsuitable as a rule.

‡Carbolic acid 1, glycerine 4. That is ♏ ·72 in 8 oz., or ♏ ·72 in ♏ 3840, or 1 in 53, or 1 in 106 when diluted as ordered.

(3.) *Deodorants* (de, away-odorans, scenting) destroy or remove foul odours. Fœtor of the breath generally indicates a septic oral or nasal cavity, or alimentary tract, and the cause rather than the symptom should be ascertained and treated. Permanganate of potassium or sodium, charcoal, thymol, and the like, may at times be needed, but great care should be exercised in giving prescriptions for deodorising the mouth.

(4.) *Local Sedatives* are not much needed, unless considerable suppuration exists in the mouth. Their action is always increased by the addition of an antiseptic. Cocaine, eucaine, opium, morphia, aconite and other powerful drugs should be used by the dentist only, not by the patient. Hot water fomentations (120° F.) within the mouth greatly relieve pain, and should be constantly used. A decoction of poppy capsules with chamomile flowers is also very beneficial.

℞ *Dec. Papaveris et Authemidis cone. ʒiv. ɱ.

Signetur, "The decoction, one tablespoonful to be used in half a tumbler of hot water."

(5) *Local antacids* are applications which neutralise acidity of the mouth. All antiseptics act in this manner by preventing fermentation. Cleanliness has the same effect, since it represents the removal of particles of food liable to undergo fermentation. An acid reaction in the mouth is an abnormal condition, and when it occurs in a clean mouth it is brought about by general causes, *e.g.*, dyspepsia, anæmia (acidity of the oral secretions is common at about the age of puberty), specific fevers, and acute rheumatism. The desirability of using strong alkalies in the mouth, quite apart from their transient effect, is, to my mind, extremely doubtful. The local action of alkalies is to check alkaline action. "Alkalies given shortly before a meal increase the secretion of the gastric juice, and so promote digestion, whilst dilute acids check its secretion. Acids given shortly before a meal generally check acidity. Acids are useful to allay thirst by promoting, through their topical action on the mucous membrane, the secretion of the alkaline saliva."—*Ringer*. In my opinion, general treatment, rather than local, is indicated in such cases, seeing that the trouble is due to the disordered condition of the body.

Magnesium hydrate and carbonate, potassium hydrate and sodium bicarbonate are the remedies advocated by those who rely upon local treatment, but such means do not commend themselves to me.

Soloids composed of the following may be used by those who are unable to cleanse their teeth properly owing to acute or prolonged illness :—

℞	Sodii bicarbonatis	gr. v.	Aqua ʒi.
	Acidi carbolici	gr. ½	
	Boracis	gr. v.	

In conclusion, I will give you a recent quotation from *The Lancet* :—"In the investigations that have been made in the pathology and etiology of dental caries but scant attention has so far been given to the nature of the saliva, although research in this direction is urgently needed. Dr. C. Rīsa, who has already done some excellent work in caries, has recorded in the *Deutsche Monatsschrift für Zahnheilkunde* for December, 1905, the result of the analysis of the saliva in 219 children of an average age of 13 years. He has been able to confirm the views of other investigators to the effect that there is a distinct relationship between dental caries and the alkalinity of the saliva, and he finds that a high alkaline reaction constitutes the best means of combating the development and progress of caries. He has carried out a considerable number of experiments to determine the means by which slightly alkaline or acid saliva may be modified so as to render its reaction decidedly alkaline. He finds that a diet, consisting of foodstuffs rich in calcium salts increases the alkalinity and quantity of the saliva, and he believes that such a diet influences in a marked way the quality of the teeth."

* Poppy capsules ½ lb., chamomile flowers ½ lb., water a sufficiency. Boil and make up to one pint.

A Tramp in Wales.

Snowdon.

It was not without misgivings that we decided upon a tramp over several of the higher peaks in Wales. It was early in the year, the mountains were snow-clad to half their extent, and the morning mists were only surpassed in density by the evening clouds. Having made the attempt and succeeded, we now declare that it is impossible to appreciate these mountains except in March or April. The summer brings tourists in swarms, and although few of these ascend Snowdon from the Pen-y-Pass side, the ascent is then perfectly easy, and moreover, when one arrives at the summit, one finds crowds who have braved the terrors of a mountain railroad and have taken tickets from Llanberis to "do" Snowdon.

But in early April the roads are practically deserted—the mountain side itself is full of morasses and hidden pools, and the snow has blotted out all traces of path, all indication of even a sheep track. The snow, too, has drifted into the hollows, so that the scene of our tramp appears smooth and inviting till we find ourselves waist deep in the soft mass. These things change as we go higher, for the frozen snow bears easily, except where a mountain stream has undermined the white expanse, and we find our feet chilled through our well-greased boots by the ice-cold water.

We take train, then, to Llanberis, and, armed with iron-shod, stout oak sticks, set out for the Gorphwysfa Hotel which is at the head of the Pen-y-Pass—six miles distant from the station and one thousand feet above sea level. The road passes to the right of Llyn Padarn, across which the famous slate quarries rise tier upon tier into the heights. So plentiful is slate in this locality that gate posts, porches, and even the uprights for wire fences are made out of suitably sized slabs; the walls also are formed of loose masses of blue slate piled one on the other, similar to the stone walls of the

Yorkshire moors. After a mile or two we leave civilization, and tramp between rocky hills, rising almost sheer from the valley in some parts, and in others studded with boulders of enormous size. We meet no living thing, save a few mountain sheep, which provide acrobatic entertainment gratis, and astonish the uninitiated by the manner in which they scale the loose stone walls on either side of our road.

Another mile-stone passed, our time from the last just over thirteen minutes, and the road uphill all the way. Good going, and only two more miles to the head of the pass, and yet these final furlongs seem interminable. We tasted food four and a half hours ago, when starting on our journey, and the mountain hunger is upon us; we require no "chef" to exercise his art in tickling our palates. We exchange few words, except those of conjecture as to what fare the inn can provide. Never before has nature been so insistent with her demands for fuel. At the Gorphwysfa Hotel we demand food and arrange for a bedroom. Who shall describe the size of the vegetable dishes or the vast expanse of joint? These things are for an epic yet to be written. After dinner we sit in the hall and smoke peacefully, surrounded by ropes, alpenstocks, and the appurtenances of climbing in all its forms, not forgetting a stretcher of up-to-date ambulance pattern, which we devoutly hope will not be required for our humble selves. We feel no desire to obtain fame in such an undignified manner.

Early to bed, where, though the moisture glistens on the thick stone walls, we sleep warmly under a plentiful supply of blankets. At half-past one a rapping at the door wakens us, but a glance through the open window decides us to forego the night ascent which we had planned; driving snow in a howling wind is no weather for climbing on a moonless night.

Breakfast at nine, and the outlook uninviting; half frozen rain and thick swirling mists all around. By eleven o'clock, however, we see a break in the clouds and resolve to take our chance. Passing round to the left of Crib Goch, we reach, by a fairly broad though rough road, the old copper mines, and thence upward and eastward to Llyn Llydaw, 1,415 feet above sea level and one mile from the summit. It is now that the climbing begins. We have another 2,150 feet to ascend, and the path is deep in snow.

After skirting several smaller lakes we reach the foot of the zig-zag track, where we halt for refreshment and rest, and we need both.

Walking over a rough and rocky path hidden in snow is more tiring than one would imagine; the feet never reach hard ground at the expected moment, sometimes too soon, often too late, and worst of all frequently on the edge of sloping or sharp rocks which wrench at our ankles till they ache. Then we turn to the zig-zag path. Here and there we can detect the sharp angles where the snow has drifted away from the surface, but the major part is hidden. We scramble on, hands and feet doing strenuous service, past rocks hung with icicles, some of them six feet long, over loose stones on which we stumble where the snow is soft in wind-sheltered spots. Now we feel the "bite" of the mountain wind, and the air as it enters our lungs seems like pure oxygen, so exhilarating is its effect. Within a quarter of a mile from the summit we rest again for a few minutes and turn our backs on the snow-laden wind that blows down from the ridge, while we discuss the possibility of breaking through the overhanging snow cornice that guards the summit.

From our present position it appears to project quite six feet horizontally from the sharp ridge of the mountain, and from the structure of the snow blown at us by the wind we see that it is newly fallen in a half frozen condition. It is evident that the surface layer is not holding, and the question remains as to whether the overhanging mass will slide on top of any climber daring enough to work his way through the lower portion.

The lighter man attempts the passage, while the heavier takes a firm stand on solid rock immediately below him prepared for a slip. The scout has made no more than fifty steps when he slides back ten with a rush of loose snow, clearly showing that the cornice itself is unsafe. We look around for a feasible means of gaining the summit, and decide on a small buttress, or boss, of irregular rocky formation about a hundred feet high, and so exposed as to present a fairly snow-swept appearance.

Up this boss we climb, hands and feet doing equal duty, working round the over-hanging boulders, and at last reaching the ridge along which we walk to the highest point in England and Wales.

Looking down from the ridge, on the opposite side to that up which we climbed, we see the mountain cog railway, by which passengers are conveyed from Llanberis. The walking route from this place is, however, so easy and safe that, but for the distance, any one in moderate health could dispense with the rail without much inconvenience. The telegraph poles at the side of the line are bedecked with white streamers projecting at right angles to the posts and pointing due north; these are formed of frozen snow driven continually by the north wind against the wooden intruders. The wires, too, with their burden of snow—carried not on top, but on their north side—resemble broad white satin ribbons.

We hurry into the "Hut" or "Hotel" on the summit, and the change from the dazzle of the snow to the comparative darkness of this iron building (which is really well lighted) is so intense that we fail to see the advertisements of welcome "cakes and ale."

Our sight restored to us, we hasten to repair the omission, and thus fortified we mount the cairn, marvel at the scenery of the Capel Curig route (the way of our ascent), wonder how we managed to climb it in such weather, and then, turning our faces northwards, stumble down the four and a half miles to Llanberis, where the train takes us back to our starting point, at Colwyn Bay.

R. BEADNELL-GILL.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

THE vacation is nearing its end, and staff and students are dribbling back to their work from what we trust has been a pleasant and enjoyable holiday. At odd moments, too, the stranger may be seen within our gates, wending his way, as we all went it once, towards the Medical School offices. How many of them will be enrolled into our community has not yet been made known: these statistics of entry are state secrets which do not come to the ears of the Passimist. It is permissible, however, to express the hope that the number of those who have taken out their letters of naturalisation at Guy's will compare more than favourably with that of any other London hospital. As usual, there are alterations to be chronicled, though this time they are slight, and, indeed, scarcely worth more than passing mention. In the smoke-room the old round tables have been replaced by two new square ones, giving more elbow room, but scarcely making the brave show that the old furniture did. A few additions to the wall decorations are also noticeable, amongst them being some of the original *Guyoscope* drawings, which we are glad to see have found a permanent resting-place where they can be regarded as heirlooms.

The dissecting-room has undergone its annual rejuvenation and is looking smarter and more workmanlike than it ever did before, the only thing wanting to make it perfect being the electric lights over each table—an installation often talked of, but never executed. At present we have light enough, but during the winter session, on a dull day, the gloom in the dissecting-room is more than funereal, and the side gas-lights are hardly able to dispel it. The same want of proper illumination is found in the new anatomical theatre. Two elegant electric lamps are suspended over the lecturers table, where they afford just enough light to enable the lecturer to realise that he cannot properly read his notes. On more than one occasion a prosaic, old-fashioned oil lamp has had to be requisitioned while a clinical lecture was in progress, owing to the dim light of the electric lamps. It is a small matter, and one easily to be rectified before the foggy days are upon us.

THE next issue of the GAZETTE will be the "Students' Number," and, in accordance with time-honoured custom, it will be mainly devoted to the interests of the new comer. The aim of the "Students' Number" is to provide the new chum with a reliable guide to the best methods

of pursuing his studies at this ancient and honourable Foundation. It is not, indeed, a mere guide book. For that purpose the official green book serves, and serves beautifully. Does it not give a magnificent plan of the hospital buildings, "showing Ararat and the utmost bounds of the lands of Arimasp," with views of the swimming bath, and the College, and an inimitable map of the regions surrounding the hospital? The "Students' Number" could not, even if it would, improve on that gratis guide book, but it attempts to tell the new student of matters about which the green book is comparatively silent. It serves to initiate the new comer into the mysteries of his heritage as a Guy's man, and to give him working particulars of the various clubs and societies. We would therefore appeal to secretaries, and others connected with these various bodies, to furnish us with full and detailed accounts of their associations. We refer more particularly to the various athletic clubs, and we shall be pleased to publish such particulars as are available in full. We confidently look to the secretaries to co-operate in making the "Students' Number" a really useful and attractive issue, adding merely this proviso, that all copy destined for publication in that number should be in the editor's hands before Monday, September 17.

OUR appeal for a discussion of Dr. Haldane's lecture on "Life and Mechanism" has met with more or less encouraging response. More, for the subject for discussion was not one which would appeal to those uninterested in something that trenches on abstract philosophy; less, for we had hoped that there were controversialists among us who would have made better use of the openings that Dr. Haldane undoubtedly gave, or who would have advanced further and more telling arguments than those which our correspondents have adduced for or against vitalism. As a matter of fact, there has been a great deal of sameness and repetition about the letters which we have published. Very few of our correspondents have troubled themselves to examine the matter critically. Some have written in support of their own theory; others have attacked "the other man's," but we have lacked a letter which took the lecture as a whole, traversing it point by point, and discussing it impartially and philosophically and without prejudice. But on the whole the correspondence has been encouraging, so much so, indeed, that we hope in the near future to publish some other equally controversial paper, which may enable those who took no part in this discussion to attack or defend it.

FOR (we make no apology in reiterating the fact) discussion and correspondence are of vital importance to the successful life of a paper like the GAZETTE. The question whether such discussion does any good to the man who discusses or the subject discussed, is a matter which each must decide for himself. Someone has correctly said that there are two classes of men, the man who invariably writes to *The Times*, and the man who never on any occasion ventures to indite a note of protest or praise to a newspaper, and—a conclusion on which there might be a reasonable difference of opinion—that the former is the better public animal. At this hospital it seems that the latter class undoubtedly predominates. If the GAZETTE depended on its letter bag, or the empty box in the colonnade, to fill its columns, it would have to appear half-yearly instead of fortnightly. This is a condition of affairs which, to the editor at least, is as distressing as it is discouraging. A stray letter is often an invaluable asset in itself, for it may contain the germ which might colonise a whole page of Passim. It is a point we would earnestly ask our readers to bear in mind, especially in these days when "copy" is so scarce that the temptation to fly to that refuge of the worried sub-editor, the scissors-and-paste-cutting-method, is almost irresistible.

WE have to acknowledge the receipt of a new contemporary—the *Transvaal Medical Journal*, a venture with which, it is pleasant to record, several old Guy's men (and, if we mistake not, an old collaborator of this GAZETTE) are associated. It is a neatly-got-up monthly, containing much interesting clinical and local information,

and it is the first issue of a medical paper in the new colonies. In the issue before us, Dr. Rogers, an old Guy's man, contributes an interesting paper on two cases of intestinal obstruction, and amongst the other principal articles are papers on "Six cases of accidental vaccination of the conjunctiva," "Hydatid cyst of the orbit," and "Malæna neonatorum." It possesses an excellent review of current literature, and has a well-filled correspondence column. We wish our contemporary a long and successful career, and are glad to see that it is already established—and evidently read—in the Library.

The detailed account of receipts and payments of the Garden Fête at Blackheath, which appears in this issue, shows very clearly how successful that venture has been. A sum of £393 16s. was realised, and after subtraction of the necessary expenditure, a balance of £330 1s. 10d. remains in hand for the endowment of a cot. This has been further increased by several generous donations, which have brought the total up to nearly £370. Blackheath has risen well to the occasion, and we have no doubt that within a short time the full amount necessary for the proper endowment of a cot in the wards—which is approximately £500—will be in hand. We can do with many more cots, and there are other London suburbs whose indebtedness to this hospital is as great as that of Blackheath and Lee. It is to be hoped that the example set by these two districts will serve to stimulate the others towards showing their gratitude in a more tangible fashion than has hitherto been done. To those who have helped to make the Garden Fête such a success we tender our best thanks, together with the assurance of our cordial appreciation of their efforts on behalf of Guy's Hospital.

Amongst the alterations and improvements which call for mention in this column, there is none more important than the construction of the new electric lift in the Medical Buildings. We wish to say nothing in detraction of the old water-lift which has done such yeoman service in the past, and which may be counted upon for some further years of usefulness. It is true, it had its failings. At times it stubbornly refused to work. Certainly it never obtained that popularity which was—and is—extended to its more modern namesake in the surgical wards. The latter could be worked and manipulated by everyone—even by the small boy in splints, who found its smooth and easy running so attractive on occasions. The Medical Buildings possess stairs which are far more difficult to mount than those on the surgical side, and though the old water-lift had its good points, no one will be so conservative as to deny that it is high time it was superseded by a more easily workable and less refractory piece of apparatus. The new lift will doubtless be an improvement upon the elevator in the colonnade, and its completion will be hailed with delight by everyone whose business it is to ascend several times during the day to Bright and Queen, not to mention the lower wards.

It is a very long time since the staff, as a body, sat for their photograph, and few of us possess a copy of that excellent full-plate that adorns the Library walls. At Honor Oak Park, it is true, a somewhat newer and smaller print is to be found, showing a posse of members of the surgical staff, but it seems to be a picture which is almost unique, and of which copies are at present unprocurable. The majority of us possess a photograph of one or other of the staff included in those group photos which are taken periodically when a new firm meets or an old one breaks up. These mementoes are of a more personal, less general interest, appealing solely to the various members of the firm, and it is obviously impossible for any student, however keen on the subject, to obtain a collection of all such prints. There is little doubt, however, that many of us would gladly avail ourselves of an opportunity whereby we could obtain a photograph of the collected staff, somewhat on the lines of the Library photograph. That representation, alas! is out of date. Many of the faces that figure on it are with us no longer, and some of the present staff do not appear in the group. A new grouping and a new photo-

graph are required, and we venture to think that there would be but little difficulty in arranging them. Such a group picture of the staff will be of value and interest to most of us, present students as well as past. A suggestion has, indeed, been thrown out that some such photograph should be taken on behalf of the Million Shilling Fund, and that it should be sold in aid of that sadly languishing undertaking. It is a suggestion we would heartily endorse, and commend to the consideration of the staff.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Life and Mechanism.

SIR,—The reading of Dr. Haldane's paper has suggested to me what is, I think, the explanation of diversity in the individuals of a species.

As he mentions, the whole organism of any animal consists of a great number of living cells, each of which may be considered as an individual. In the same way that various individual animals are preserved, and other individuals destroyed by the process of mutual selection, thus forming a number of different species, so various individual cells are preserved in each animal organism, whilst others are destroyed or prevented from multiplying. As this process would proceed to a greater or less extent in various groups of cells and in different individuals, due to the influence of circumstances, food, environment, etc., various cells or groups of cells would be more or less largely or numerously developed in various individuals, thus causing individual differences and peculiarities in size, form, colour and temperament, and so accounting for the extraordinary fact that no two animals of any species are exactly alike, and often that the two sides of the body in one individual are not absolutely symmetrical.
—Yours truly, C. DOSWELL WALLIS.

47, Chapel Road, Worthing, Sussex.

DEAR SIR,—It is indeed a pleasure to find that physiologists are at last beginning to realise that life is not, after all, a mere matter of chemical formulæ, and that there are some aspects of the question which they have never adequately studied. The modern tendency towards materialism has had its day, and it may be questioned—I, for one, certainly do question it—whether its influence has been for good, either in science or in theology. One cannot, of course, close one's eyes to the fact that it was an honest tendency, and that the men who glibly put down vital phenomena to "diffusion," "chemical affinity," "biotic energy," and such like things, which they never troubled themselves to explain, really believed that their researches were bringing them nearer to the goal. It is therefore a good sign to find that some of them are beginning to find out that true progress does not lie along the lines they have followed so far, but rather in other, perhaps older, directions. It would be too much to hope that everyone will agree with Dr. Haldane, or that those who have been staunch supporters of the materialistic theory will be courageous enough to admit that they have erred, but the very fact that such a lecture has been delivered and is being discussed, proves that the pendulum is swinging back. Some of your correspondents have called it a retrograde movement, but I, for one, fail to see that a retrograde movement is necessarily an evil.

Even at the risk of being considered retrogressive, I am willing to proclaim myself a vitalist, and I am confident that a time will come when no scientist will be ashamed to admit the existence of forces which he now denies or sneers at. I am, moreover, convinced that vitalism is capable of being studied, and ultimately perhaps explained, not on a purely materialistic basis, though. If physiologists devoted themselves a little more to psychological and psychiatrical work, they would be able to approach the subject in a much more broad-minded and far-seeing manner than they do at present. I confess a great deal of difficulty has been raised by the loose and unscientific manner in which vitalists, starting with Bichat, have written about the subject, but much of this difficulty will no doubt be cleared away in time by patient research. For far from discouraging sober research, I rather think vitalism, or this modern return to a trend of thought which some of us regard as obsolete, will serve as a spur and inducement for workers and students alike.—I am, yours, etc. VITALIST.

August 4, 1906.

SIR,—I have read Dr. Haldane's lecture on "Life and Mechanism" with a great deal of interest, not unmixed with astonishment. As you are good enough to invite criticism and comment, I trust you will allow me to register my protest against the retrograde movement which seems to have carried Dr. Haldane and other physiologists off their feet. I fully agree with the lecturer that we do not take enough cognizance of pyschology. I also agree that many things are, at present, incapable of a purely materialistic explanation. But I certainly do not hold, as Dr. Haldane seems to hold, that we should rest content with a vitalistic hypothesis which is, after all, merely a cloak for unmitigated ignorance. Destructive criticism must always be helpful, and therefore welcome, but to attempt to destroy the materialistic theory and bid us believe in one of which the main premise seems to be a denial of human capacity ever to explain anything at all, seems to me to be retrogressive and absurd.—I am, etc. G. P.

August 18th, 1906.

Under Strict Aseptic Conditions.

"The treatment of pleuritic effusion," said my uncle, helping himself to another poached egg, "is regulated by the necessities of the case. In this instance, would you aspirate?"

From what my uncle had told me of that particular case, I thought that aspiration, as a method of treatment, would at least do no harm. I expressed that opinion all the more readily, and with greater conviction, because I knew that my uncle had already fully made up his mind that he would aspirate, and that the combined disapproval of the whole of the faculty resident in our town would not have moved him to abandon his determination. When breakfast was finished, my uncle summoned his general factotum, who had already filled two bags with the necessary—and unnecessary—instruments, put on his hat, took up his stick, and with me walking by his side, and James following sedately in the rear, set off to visit his patient. When we met any of his numerous acquaintances on the journey to the scene of aspiration, he hurriedly excused himself for not stopping longer than merely to pass the time of day, on the ground that he had "an important operation" to attend to, an announcement which visibly impressed the acquaintances, and gratified my uncle's sense of importance.

My uncle's patient was a middle-aged labourer, pale of face, and oppressed in his breathing, who lay on a little pallet bed in a small room, of which the furniture seemed to consist mainly of antimacassars, stray articles of wearing apparel, and dilapidated bentwood chairs. There was a thin fire burning in the grate, the windows were closed, and the atmosphere was sufficient testimony to the fact that they had not been opened that morning. On the table were the remains of a bloater. On the floor a couple of small children busied themselves, after the manner of infants, in trying to make cloacæ in an old stocking, the greater part of which—as my uncle, whose metaphors were always medical, justly observed—was already in an advanced state of sequestration. At the foot of the bed a tired-faced woman infringed the copy-book maxim by trying to do two things at once—feeding a crying baby, and reading extracts from the morning paper to her husband.

"How is he this morning, Mrs. Hall?" asked my uncle, in his eagerness depositing his silk hat upon the remains of a bloater.

"Good mornin', doctor. He's worse—leastways, he ain't so well nor he was yes'treen," said the woman, imitating the historic Mrs. Squeers' method of wiping her hands on the child's hair. "But he's ready for ye, doctor. Sit up, Sam. 'Ere's the doctor come to tap ye."

"We shall want a large saucepan, and plenty of boiling water," said my uncle. "And you'd better take the children out, Mrs. Hall. Here's a penny for you, my laddie. Now then, James, get the things out."

While James arranged the instruments, and Mrs. Hall marshalled her progeny out of the room, my uncle divested himself of his gloves, asked Sam to repeat "Ninety-nine" almost that identical number of times, explained for my benefit three entirely different and opposite theories regarding bronchophony, and appealed to James for substantiation of his assertion, that never in all his practice had he heard a better skodaic note than in this case. Then the saucepan was put on the fire, and the needles and connections placed in it. Mrs. Hall cleared away the vestiges of the bloater, with the exception of such adhering to the brim of my uncle's hat, and James arranged a number of bowls filled with variously-coloured antiseptic solutions on the table.

"It is of the greatest importance," said my uncle, addressing us all collectively, "that in every operation, however trifling, the principles of thorough and rigid asepsis should be thoroughly adhered to. For that reason I wash my hands very carefully—a little more lysol, James—ten minutes with soap and water, and after that in xylol and ether to get rid of grease. Then in perchloride—the brush, James—and finally in carbolic. One can never be too careful."

When this complicated process of cleansing had been honoured to my uncle's satisfaction, he instructed James to fish out the needles from the saucepan, or, as he preferred to call it, the steriliser. Then he took up some lint and commenced to clean up the patient.

"You might as well wash up, too. Steve," he said, "in case I need any help. And get a clean tube—a culture tube for Mr. Stephen, James. Now then—mind the sterilizer."

James in his haste had knocked against the handle of the saucepan, and forgetting his aseptic condition, my uncle flew forward to save the instruments. He collided with a chair and his hands came into contact with the fender, but he prevented the saucepan from being overturned, and was happy.

"How very annoying," he said. "I must wash over again. Some more carbolic, James. Put the things back, and be more careful."

He washed up once more, and I cleaned up the place where he intended to aspirate, the exact site of the puncture having been settled after much preliminary discussion. "Ready, Steve?" said my uncle, advancing with his hands held high in the air to keep them from all contact with profane and septic surroundings. "Very well, fix the aspirator, James. Bless my soul—where's the pump? Not in the bag? Nonsense. I put it there myself. Here you are—I'll get it out. Now we'd better begin. Oh—ah, some more lysol, James."

Having once more sacrificed his hands at the altar of asepsis, my uncle took up the needle, carefully tried its point, and then laid it on the dirty bed quilt. Then he gave the patient another rub with his sterilised lint, working away so vigorously that his cuffs rolled down. So he turned them back, and once more washed up. Then he observed the needle on the bed, and took it to

the steriliser where he managed to touch the sides of the saucepan and got himself smothered with soot. As he adjusted and readjusted his pince-nez from time to time, the greater part of the soot was gradually transferred to his face, which at the end of the operation might have been described as distinctly negroid in colour.

"It takes time, Steve," he observed, apologetically, "but I always like to be certain that my things are perfectly aseptic. A little more lysol, James. Now then."

My uncle took up the needle, knelt on one knee, touched the bed clothes inadvertently, and apparently unconsciously, readjusted his glasses, put the needle on the floor, took it up again—and punctured.

"There," said my uncle, as he watched the fluid running into the aspirator. "That's what I call well done. In the old days they would have wasted valuable time, and the patient would have run the grave risks attendant on imperfect asepsis. You may come in, Mrs. Hall."

Reviews.

The price of books submitted for review should in every case be stated.

Clinical Obstetrics. By Robert Jardine. Second edition. (Redman, Ltd.) pp. 604. 17s. nett.

This volume is devoted entirely to the clinical side of obstetrics, but scanty mention of the theory and mechanics being found throughout the book; for this reason alone it is not suitable for examination purposes, and so is not likely to find favour with students. Again, the more elementary part is decidedly deficient, undue prominence being laid on all abnormalities, accidents, and complications of labour, giving one the idea that normal labour is not nearly so frequent as it is, and in fact the author rather draws on his imagination in stating complications; as for example, among the complications of pregnancy, gall-stones are mentioned, the paragraph commencing, "I have never yet met a case of gall-stones during pregnancy, but they must occasionally occur." There are dozens of other diseases which "must occasionally occur," but are not mentioned here. This undue prominence of rare affections is annoying in a book on ordinary clinical work. The effect of the specific infectious fevers is more fully considered here than in most text-books, and another complication, also rather neglected in text-books, excellently described, is cardiac disease in its several aspects; this latter is well illustrated by a series of actual cases exemplifying all the different lesions.

As in the first edition, the author is very keen on the treatment of eclampsia, and gives thirty cases illustrating the methods of treatment by saline infusion which he advocates strongly; it consists in the subcutaneous or intravenous injection of potassium bicarbonate, gr. xxx. to the pint of normal saline solution, or half a drachm each of sodium chloride and sodium acetate to the pint of water. From a perusal of the cases the results are excellent.

We are surprised at the statement that a De Ribes bag made of silk is so difficult to render aseptic; surely boiling will do all that is necessary without injury to the bag. The text, which is copiously illustrated with cases from the author's note-book, is written in rather an unpleasant jerky style; but in spite of drawbacks the book makes very interesting reading.

The Salmon.

By Leoren's dusky shadows
He kept his rocky hold;
And twice I tried his wary eye,
And twice in pride he rolled—
A flash of living silver,
A bar of molten gold.

But the third time I struck him
With fly of cock and teal,
And felt the leap of my inmost soul
That only anglers feel,
And my heart beat time to the tugging line
And the music of the reel.

This was no lazy English trout
Reared in a land of drouth,
Bred in the smiling shallows
Of the rivers of the south,
To lurk where pleasant May-winds
Blow food into his mouth.

But one who dared the ice-bound stream
And faced the winter spate,
With a courage born in the ocean deeps,
Which could not brook his fate,
And a strength of steel your arm might feel;
Ten pounds beyond his weight.

Three several times I brought him
Under the mossy bank,
Risking the dainty slender gut
Where weeds are long and rank;
And thrice he passed to the deeps again
With a flash of his silver flank.

There never yet was green-heart grown,
Nor line was ever spun,
That could hold his rush, like a horse at speed,
So ever I let him run;
And he drew my heart-strings with the line
Until the set of sun.

He would not yield to hopeless fate,
As you or I might do,
But ever and always turned again
To fight the fight anew;
And when at last I had hauled him in
I felt I loved him, too.

Myomectomy.

CLINICAL LECTURE BY DR. HORROCKS.
MAY 7TH, 1906.

GENTLEMEN,—During the last few months we have had several cases of myomectomy, which means the cutting out of a myoma or fibroid tumour from the uterus. When I was a student this operation was practically unknown; it was never lectured upon, and, as it requires absolute asepsis for its efficient carrying out, it was very rightly not attempted. As it is an ideal operation, inasmuch as the tumour or tumours, for they are generally multiple, is got rid of without removing any healthy organ, I will trace its gradual evolution by passing in review the various methods of the treatment of fibroids in the past up to the present day. You know that a fibroid consists of muscular fibres and connective tissue, and that it mostly starts in the uterine wall. It may start in any part of the uterus, fundus, body, or cervix, though it is much rarer in the cervix. It may arise in the Fallopian tubes, or the round ligament, or the utero-sacral ligament, and some people say they have found fibro-myoma in the ovary. But the ligament of the ovary, which runs from the side of the uterus to the ovary, contains muscular fibres, and some of them are found spread out on to the ovary; and most pathologists believe that so-called fibroid of the ovary springs from these muscular fibres; in other words, that myomata are always of muscular origin.

Sometimes a patient will say to you, "What brings these tumours?" Nobody knows what causes them, but we know fibroids occur relatively more frequently in unmarried women and in those who, having had children, have for a long time ceased to have them, than among married women during their child-bearing period. Thus they seem to occur when the uterus is not bearing children.

I will first make a diagram of the pelvic organs and refer to it during my remarks.

If the fibroid starts in the body of the uterus, which is the commonest site of all, it may bulge externally, so as to lift the peritoneum up towards the abdomen. This is called sub-peritoneal. It may work into the general cavity of the uterus, and is then spoken of as sub-mucous. In either of these cases it may get driven out of the uterine wall until it is attached only by a stalk. It is then called a polypus. It may work its way between the broad ligaments, though this is uncommon. The history of these cases varies very much indeed.

We will now take the various methods of treatment which have been adopted for fibroids. The first is the *expectant* treatment, or waiting for the menopause to come on. That was the treatment of the practitioners of the past, and it is adopted by some medical men at the present time. It is not a fair statement to recommend operation to a patient with fibroid tumour on the ground that the tumour will necessarily prove fatal to her. It is not so. I have had ladies under my observation for years—anything between ten and twenty years—with fibroid tumours, who have, by my advice, waited for the change of life and the shrinkage which results at that time in the generative organs, in the hope that the tumours would partake in that shrinkage; and a good proportion of them are alive to-day, though they have had no operation whatever. No doubt other obstetricians and general practitioners have had a like experience. But nobody can say that about ovarian tumours; if a man tells you he has been watching a case of cystic ovarian tumour for ten or twenty years you will have good reason for suspecting that the diagnosis is wrong. In other words, cystic ovarian tumours are fatal if left alone; they invariably cause death by some such process as rupture. So that, even before the days of asepsis, one was justified, in the case of a woman suffering from cystic tumour of the ovary, to say, "You must be operated upon or it will kill you." An ovarian tumour was said to kill in two years. Now, fibroids of the uterus may exist without pressing on anything in the pelvis, and without causing much trouble in the way of hæmorrhage or pain. There are ladies walking about who have fibroids and do not know it. When you get into practice you will be astonished sometimes, when examining a woman for some such condition as indigestion, to find that she has a large abdominal tumour.

She may or may not have known of its presence, but as it caused no particular pain she had not sought advice for it. If you have such a woman as a patient, and she is, say, forty-five years of age, you can tell her that in a short time she will have a change of life, and then it is the rule for these tumours to shrink in size, and that no operation may be necessary. That was the kind of advice which was given universally until a few years ago. I saw this morning a lady who has been a patient of mine for the last fifteen years; she has a large tumour, but is very well except for that. Some members of our profession say whenever you meet with a fibroid of the uterus you should remove it: but I do not agree with that sweeping dictum. Every case must be treated on its own merits. You perhaps know that fibroids of the uterus are usually found in women over thirty years of age; they are practically unknown under twenty years of age, and are rare between twenty and thirty. If one does occur under twenty it is published as a curiosity.

The second method of treatment was by means of *drugs*. Of course, ergot was the favourite, and the amount of ergot and ergctine given all over the world for fibroids has been enormous. It is still the best drug we know for producing uterine contraction. Hydrastis canadensis is also useful. Half a drachm of the liquid extract of hydrastis and half a drachm of the liquid extract of ergot to an ounce of chloroform water is a useful combination to check hæmorrhage, because these patients nearly always suffer from menorrhagia. Other drugs, such as mammary extract, suprarenal extract, adrenalin, digitalis, and strychnia, have been given by different people to diminish the size of the uterine tumour, also with the idea of lessening the menorrhagia and carrying the patient on to the menopause.

Then, some people lay stress on *diet* in this condition. Ergot causes indigestion, therefore I tell the patient to take the medicine a couple of weeks and then leave it off for a week, and then resume it. These patients may suffer from emaciation, and if they do you must suspect fibroid degeneration; the tumour may become necrotic, or it may become fibro-cystic, or sarcomatous, or it may suppurate.

The fourth method of treatment is *hygienic*, and that means not only fresh air, but leaving off anything tight round the abdomen—corsets, belts, and such things—which force the tumour into the pelvis and give rise to pressure symptoms. All the clothing should be loose, to allow the fibroid to grow upwards into the abdomen, when pressure symptoms will be less likely to ensue. For the same reason the patient should avoid all straining, and thus you must be careful to prevent constipation. At her monthly periods the patient may be obliged to go to bed and rest during the worst days.

If the fibroid is in the pelvis, you can relieve the pressure by putting the patient in the semi-prone position whilst she is resting in bed. Baths have been recommended, and many patients derive benefit by going to one of the hydropathic establishments, but it is not so much the water at the baths which causes the benefit as the rest and diet, and regular living, which they get at these places, which are beneficial.

Fifthly, there are *intra-uterine applications*. These you will find mentioned in the older as well as in modern medical books. The practice was to give ergot for menorrhagia, and if that failed to stop it, applications were used at the end of a probe, wrapped round with cotton wool. Some people said menorrhagia was due to endometritis. I do not know that it is so altogether, because a fibroid tumour growing in the wall or in the body of the uterus enlarges the menstrual area, the area of menstrual mucous membrane, and so there is menorrhagia. The substances passed included tincture of iodine, liniment of iodine, pure carbolic acid, and carbolic acid and iodine, *i.e.*, iodized phenol, and even strong nitric acid, has been used in this way, and a red-hot probe, the electric cautery, so as to burn it. All that was done with the primary object of lessening the hæmorrhage, and the secondary object of lessening the tumour. You can readily understand how, under this kind of treatment, sloughing sometimes occurred; and septicæmia was one of the common causes of death from fibroids.

Curetting the endometrium and applying some caustic such as tinct. iodi, lin. iodi, phenol,

iodized phenol, is still largely practised, and often succeeds in, at all events, lessening the menorrhagia.

The next method of treatment I shall only mention to condemn, namely, by electricity. A French physician, Apostoli, recommended the application of the constant current of electricity, developed from a series of large Leclanché cells.

The apparatus was very expensive, costing about £20, and as people said they were getting results from it, we had one for Guy's. One pole of this large battery consisted of a big copper plate, and clay was put over the abdomen, and the copper plate on the clay. The other pole was in the form of a probe, made of platinum, which passed inside the uterus. We had it in Dorcas ward. With this powerful battery a current of 50 or 60 milliamperes could be produced, so that the amount of electricity which passed between the poles was considerable. Pictures were shown to illustrate how the electricity converged from the copper plate towards the fibroid, and caused it to shrink without damaging the uterus. It was tried at Guy's by Dr. Galabin and myself, but there was practically no beneficial effect. Moreover, it was very painful to the patient. Cases were published by different observers, where the treatment caused sloughing and death, especially when the internal pole was made sharp and pushed into the substance of the tumour itself. But if you use a sharp-pointed probe you will cause shrinkage even without electricity, because the puncture lets off some of the serum. This Apostoli method was tried in practically every hospital in London, but it fell into disrepute, and I believe it is not now used at any hospital.

Another treatment for this condition was *oöphorectomy*, or the removal of healthy ovaries. This was based upon the natural shrinkage of the fibroid at the menopause. Why does the fibroid get smaller after the menopause? Because the ovaries then cease to act. Then why not remove the ovaries? That was the argument, and so both ovaries were taken away in a large number of cases. When the fibroid grew to a considerable size from the wall of the uterus, it gradually seemed to obliterate the igament of the ovary, which is naturally very short. Thus, in the removal, the operator had to cut between those two, and at the distal side he frequently left a little of the round ligament behind, into which there passes, as shown by Mr. Alban Doran, some of the ovarian tissue, with the result that the patient was often found to be losing as much blood as ever. Then it came to be said that the ovaries did not preside over the menstrual flow. But if you remove the ovarian tissue completely there is absolute amenorrhœa. Removal of ovaries completely makes the patient absolutely sterile, and causes her to be prematurely old, and to have the hot flushes and deposition of fat on the abdomen, and the other things associated with the menopause. But now this castration of the female, as it is called, has been practically given up; very few people recommend it.

Again, it was said that *tying the uterine and ovarian arteries* on each side would cause shrinkage of the tumour by cutting off the blood supply to it. This is not always successful, and I do not think it is often done now.

A tenth method of treatment was the *removal of polypi*. If a fibroid tumour becomes submucoid and finally gets pushed out by the uterine contractions until it has a stalk, everybody agrees that it should be cut off. This used to be done a generation ago with a wire écraseur, which is never used for the purpose now. Cutting through the pedicle of a polypus does not cause much bleeding, and that is not because there are no blood-vessels in it, but because it consists of muscular tissue, which contracts as soon as it is cut. But if the fibroid is a big one you cannot get at the stalk to cut it, and you must resort to taking away pieces at a time until you can reach the pedicle.

Then there is the method known as *Morcellement*, or enucleation *per vaginam*. That method was adopted before antiseptics; it was really and truly myomectomy, but was not called such. It was a very hazardous proceeding in those days, because the technique was not aseptic, and some portion was often left behind, and this often sloughed. Thus there was sometimes septicæmia, and you might lose the patient before she lost the whole of her tumour. But myomectomy *per vaginam* is seldom employed

now-a-days, though it is sometimes possible and advisable to do it. The cervical canal can be dilated by means of tents, or Hegar's dilators, or by other dilators, until you reach the cavity; or you can separate the bladder from the front of the uterus, and slit the uterus up in front, and then remove the tumour, sewing up the slit afterwards. This I have done successfully in a number of cases.

Next there was *hysterectomy*, or the removal of the whole uterus *per vaginam*. So you see when the technique for attaining asepsis was imperfect, efforts were made to avoid opening the peritoneal cavity, or the abdomen. When the tumour was very large, it was impossible to remove it *per vaginam* unless it were low down in the pelvis.

The next operation which was done was *supra-vaginal hysterectomy*. At first it was done by cutting away the uterus above a wire loop which constricted and held the stump. This wire loop was called the serre-nœud, and, to prevent slipping, two steel pins were run through the pedicle below the loop. The peritoneum was sewn carefully round the pedicle below the loop, so as to shut off the peritoneal cavity. After the operation the patient suffered so much pain from the gripping of the wire, that one had to give plenty of morphia. The distal portion had to slough off, and it was necessary to tighten the loop by a screw arrangement, as shrinking took place from day to day.

At a discussion at the Obstetrical Society of London I called it a barbarous proceeding, but at that time it was less fatal than dropping in the pedicle, as after ovariotomy.

Baer was one of the first to perfect a method of doing supra-vaginal hysterectomy without putting a wire round; he tied the ovarian and uterine arteries on each side, and, after cutting the uterus off, sewed the peritoneum over the piece of cervix left behind. He had very good results; there was little or no pain following the operation, and it was carried out all over Europe as well as in America, and soon became the recognised operation. Some men said that if you cut the uterus off in that way and dropped the pedicle, after sewing the peritoneum over it, you not infrequently had suppuration occurring afterwards beneath the peritoneum about the stump. The patient might do well for a time, but at length some of the ligatures worked their way out through the vagina or rectum, or through the abdominal scar. Even if the ligatures were not themselves septic when used, they might become so later on owing to proximity to bowel.

Hence the operation of *pan-hysterectomy* was recommended instead—that is to say, the removal of the whole uterus. Even to-day there are men in high position who strongly recommend this operation in preference to the other.

Pan-hysterectomy was recommended, and is recommended to-day, by some as superior to supra-vaginal hysterectomy, because months later you do not find suppuration occurring. I am bound to confess that when, a year or two ago, this subject was discussed at a British Medical Association meeting—I think at Manchester—I agreed with what had been said by Professor Herbert Spencer about suppuration connected with the stump of the uterus. But at the present time you can get ligatures in the shape of catgut or chromicised gut which are absolutely aseptic, and which are completely absorbed in from ten to thirty days, so that there is no possibility of subsequent infection of ligatures. Hence this argument no longer holds good. Moreover, by leaving a portion of the cervix the operation is much easier, much quicker, and more conservative. Indeed, whenever I can I leave a little bit of the body of the uterus behind, so that in several of my patients they still possess a little of the mucous lining of the uterus proper, and so each month they menstruate slightly. I think that in these cases you should endeavour to remove as little as you can.

And, lastly, we come to our actual subject, namely, *myomectomy*. That is the ideal operation if it can be done. We have had three cases of it in Queen ward, and I have one in Bright ward at the present time. Some people call it myomectomy if it is the removal of only a polypus. Literally, of course, myomectomy means cutting out a myoma, but I mean by it removing it from the wall of the uterus.

Myomectomy has not been established more than about twenty years.

The operation, which was originated by Martin, of Berlin, and hence called Martin's operation, consists in opening the abdomen, cutting straight through the uterine wall into the uterine cavity, and then shelling out the fibroid from the wall and sewing up the uterine and abdominal incisions. That is, he did myomectomy from inside the cavity of the uterus, working through the abdomen. It was rather fatal, because twenty years ago perfect asepsis had not been attained. But you can do myomectomy without opening the cavity of the uterus, namely, by cutting over the tumour until you come to the capsule, then you can separate the uterine wall from the tumour.

You have to guard against hæmorrhage, because bleeding is rather free. You can stop it partly by catch-forceps, and partly by ligatures. If you enucleate the tumour, then you can deal with the cavity which is left. The cavity will shrink considerably, and the assistant has to hold the uterus while you deal with the hæmorrhage. You should always use perfectly aseptic catgut or chromicised catgut ligatures. These can be obtained in every thickness, ready sterilized in small hermetically-sealed glass tubes. The tube is sterilized by immersion in a solution of perchloride of mercury, 1 in 1,000, and then the tube is broken and the ligature taken out with sterilized forceps and used. A fully-curved needle is run round the bottom of the bleeding cavity and the ligature is drawn through, and tied. This lessens the cavity, and lessens the hæmorrhage. It might be necessary to put in two or more such ligatures, or to tie vessels separately. The edges are now carefully brought together with finer catgut. Each tumour is delt with in the same way, for fibroids are generally multiple. But myomectomy cannot be done on every case. There may be a tumour occupying so much of the uterus that if you remove it there may be nothing but a small shell left. In the three patients I have spoken of, when we opened the abdomen we found there were several fibroid tumours; fibroids are nearly always multiple. The size of them varied from that of a tangerine orange to that of a walnut. From the patient in Bright ward I removed six separate tumours, which were in different parts of the uterus. Afterwards I sewed it up, and the patient is getting well without any rise of temperature, and I know those ligatures will not give rise to trouble. It is said that if you shell out a tumour from the broad ligament you will get trouble later on, because of its proximity to the rectum. But I want to point out that if you read the records of those cases where suppuration has followed after the patient has apparently got well and gone home, and where after a few months there is a temperature, and perhaps emaciation, and a discharge *per vaginam* or *per rectum*, or through the abdominal scar, you will find that silk ligatures were used. Perhaps the operator has prepared them himself, but inefficiently. I now use nothing but catgut, except for the abdominal wound, and for the latter I employ silkworm gut for the unburied sutures, and horsehair for the skin. For buried sutures, such as for myomectomy, you should use only perfectly trustworthy material, such as catgut, which will absorb in thirty days or less, and therefore cannot be contaminated afterwards. People say that if you remove a fibroid by myomectomy, you leave a cavity into which oozes blood; you need not mind that if all you do is aseptic. The blood that oozes into the cavity will give rise to no trouble, and will soon become absorbed. One of these cases was sent to me by Dr. Halstead, of Ramsgate, and when I came to enucleate the tumour, I found that it penetrated so close to the endometrium, that in removing it I opened the cavity of the uterus. She was 35 years of age, and perfectly healthy, and if a woman is healthy you can be sure that her endometrium is not septic. We took no extra precautions about this case. The cut surfaces of the wall of the uterus were sewn together with catgut. There was never a bad symptom. If there were pus in the endometrium, the matter would be different.

If you can do myomectomy, it leaves the patient unmutilated; she has got ovaries and a uterus. You will find recorded in literature—I have not had such a case myself—cases of women who have had children after the opera-

tion of myomectomy has been done. That in itself is a great thing. But if you remove the uterus by supra-vaginal hysterectomy, or by pan hysterectomy, you have destroyed the possibilities of child-bearing. One objection which has been made is that if the patient does have children after the operation, the uterus may burst at the point where the operation was done, that is, at the point of greatest weakness. But there are women who have proceeded to full term and have had a normal labour. We have not often done this operation at Guy's; but I believe it will be done oftener as we feel we are approaching complete asepsis, because operators will then feel bolder. I do not know whether in time to come all fibroids will be removed by means of myomectomy. It is a modern operation, and therefore I thought it was well worth while bringing it before your notice. It requires good judgment is some cases to know whether myomectomy is suitable; but at all events if it be attempted and it is found that greater difficulties are encountered than were expected, or that a large area of thin uterine wall be left rendering it difficult to prevent sloughing, or if the tumours be necrobiotic, or a septic uterine cavity be opened, then one can proceed to remove the uterus altogether in order to prevent death from peritonitis.

Appointments.

Civil.

BROMLEY, J., M.R.C.S. Eng., L.R.C.P. Lond., L.S.A., has been appointed District Medical Officer of the Sudbury Union.

EVANS, JOHN, M.B., B.S. Lond., M.R.C.S.Eng., L.R.C.P. Lond., has been appointed Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, Brompton.

ROUTLEY, E. WALTER, M.D. Brux., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Medical Officer to the Aldershot Education Committee.

Naval and Military.

Surgeon JAMES GEORGE WATT, R.N., is promoted to be Staff Surgeon in His Majesty's Fleet.

Staff Surgeon ERNEST S. TUCK, R.N., has been appointed to the *Scylla*.

Lieutenant S. C. BOWLE, M.B., R.A.M.C., has been appointed a Specialist in Dentistry to the Mhow Division (India).

A Case of Scurvy.

WHILST on our voyage to Australia the ship called in at Perim, a bare volcanic island at the entrance to the Red Sea. A stock of coal is kept there, and repairs effected to vessels by the "Perim Coal Company." During our stay there, I was kindly invited to see the following case by the Resident Medical Officer, Dr. Ashton, M.B.

Mr. X., clerk in the above firm, was suffering from spitting of blood, commencing the previous afternoon. Patient was nearly a teetotaler, and led a quiet life. He gave a history of having been out to the East before—I think to Aden—from which place he was sent home to England with some chronic bowel complaint. He remained some months in England and then returned, but has since been rather troubled, fearing a relapse, so has been careful as to his diet. Lately he has been suffering from pain in the hypogastric region; this he described as constant, but not shooting in any particular direction. He went, two days before, to a concert held on board the ship (a Trafalgar celebration), and probably took a little alcohol.

The evening previous to my seeing him, he suddenly began to cough up large quantities of blood; he lost, he thought, about one or two pints. I saw some of it in a porringer at his bedside; it was dark red and jelly-like. He coughed up a little whilst I was at the bedside. I saw a motion he had lately passed; it was firm, dark-coloured with a little mucus on one side of it. Patient was lying on the bed when I saw him, but sat up to talk about himself. He did not look very blanched; tongue clean; pulse soft, regular, about 60. I examined first abdomen, nothing normal to be detected; no enlargement of liver or spleen; and afterwards his chest. This was well formed and moved well. No dulness; the only abnormality was a few râles to be heard in the axillary region. I examined apices carefully, and could detect nothing abnormal.

I must confess, at this stage, I was not much wiser as to the cause of his trouble, but Dr. Ashton quickly threw light on it. He asked the patient to take out an upper dental plate he was wearing; on this being removed, the gums were seen to be spongy and swollen around some old carious stumps in upper jaw; on looking at the naso-pharynx some blood-stained material could be seen at the back of the soft palate. On questioning him as to diet, he said he never ate potatoes, and as there are practically no fresh vegetables to be got at Perim, he must have been living without those essentials to a diet. I must mention that there was no rash or blotches on skin or other hæmorrhages. Dr. Ashton did not take a very favourable view of his case, as he feared he would have to return to England to get cured, and so lose his post. Probably he never had dysentery at all, as it is almost unknown at Perim or Aden; he certainly did not have it when seen.

J. H. J., Surgeon, R.N.

Garden Fête at Blackheath in aid of Guy's Hospital,

JULY 12th, 1906.

RECEIPTS AND PAYMENTS ACCOUNT.

RECEIPTS.

	Stalls and Side Shows. £ s. d.	Tickets. £ s. d.	Donations. £ s. d.	Total. £ s. d.
To Cash, per Miss Sparks and Mr. Harte-Lovelace—		46 8 9	...	...
Silver Stall	31 14 9	...	...	...
Advertisement Stall	13 10 5	...	...	...
Tennis Competition	2 0 0	...	...	...
Cot Collection	0 14 0	...	...	...
Phrenology	0 12 0	...	12 7 0	107 6 11
„ „ Mrs. Collier—				
Refreshment Stall	58 17 2	4 19 6	...	...
Character Reading	2 4 0	...	...	...
Colour Magic	1 19 6	...	...	68 0 2
„ „ Mr. and Mrs. Arbuthnot Lane—				
Flower Stall	29 6 6	8 7 6	1 1 0	...
"Ireland"	10 10 0	...	...	49 5 0
„ „ Agents, Gate Money and Tickets	...	38 5 6	...	38 5 6
„ „ Mrs. J. H. Davies—Sweet Stall	23 7 6	1 15 6	...	25 3 0
„ „ Mr. and Mrs. Warwick Crouch—				
"Zoo"	12 0 0	6 0 0	...	...
Putting Competition	2 0 0	...	...	20 0 0
„ „ The Misses Colbourne, J. & E. Barrow and Lay Art Stall	17 3 9	...	...	17 3 9
„ „ Mrs. Martin—Concerts	16 6 11	...	...	16 6 11
„ „ Miss Lindley—Donation	...	...	15 0 0	15 0 0
„ „ Mrs. Maidlow Davis and Mrs. Templer Downe—				
China Stall	13 10 8	0 17 6	...	14 8 2
„ „ Workmen on Sewer Construction—Collection...	...	...	10 4 2	10 4 2
„ „ Mrs. Octavius Beven	...	5 4 6	...	5 4 6
„ „ Messrs. Boxer & Carse—Pavement Artists ...	3 8 5	...	...	3 8 5
„ „ Miss Balfour—"Post Office"	3 3 0	...	...	3 3 0
„ „ Mr. R. O. Skinner—"Picture Gallery" ...	0 16 6	...	...	0 16 6
	£243 5 1	£111 18 9	£38 12 2	£393 16 0

PAYMENTS.

	£ s. d.
By Cost of fitting out Fête, Hire of Commissionaires, etc.	34 15 3
„ Printing, Advertising, etc.	11 9 10
„ Royal Artillery Band	7 7 0
„ Postage, Stationery, Carriage of Goods, and Sundries	10 2 1
Balance—Amount forwarded to Guy's Hospital	330 1 10
	£393 16 0

Examined and found correct, A. B. KEITH, Chartered Accountant.
8th August, 1906.

W. ARBUTHNOT LANE, Hon. Treasurer.

LIST OF DONATIONS.

	£ s. d.		£ s. d.
Mr. J. Cator	5 5 0	Miss Seaton	1 1 0
Engineer Vice-Admiral Sir A. J. Durston ...	3 3 0	Miss Lindley	15 0 0
Mr. Robinson	2 2 0	Collected by Workmen on Sewer Construction	10 4 2
"Kentish Mercury"	1 1 0		
Dr. Hugh Davis	1 1 0		£38 17 2

Some Cases of Suppuration in the Bladder.

Paper read before the Pupils' Physical Society by C. W. GREENE.

GENTLEMEN,—I have taken as the title of my paper this evening, "Some Cases of Suppuration in the Bladder and Urethra." I do not propose, however, merely to narrate to you a series of cases which have lately been in the wards here, but to put before you some of the numerous difficulties in the diagnosis and treatment of such cases as commonly occur, drawing evidence as I go along from a few notable cases.

First then, as to difficulties in *diagnosis*, which are often manifold; a case of this nature nearly always gives a history of frequent and painful micturition, accompanied in many cases by hæmaturia, or definite attacks of retention. Now hæmaturia makes us think of some tumour of the bladder, especially if the attacks are sudden and of rare occurrence; increasing frequency of these attacks may indicate ulceration of the bladder, and, therefore, probably a malignant growth. But, on the other hand, an enlarged prostate often causes hæmaturia equally profuse, and so does an attack of acute cystitis, not to mention calculus. In a doubtful case, repeated microscopical examination of the urine for shreds of tissue may help to clinch the diagnosis; but in reading through a large number of reports of such cases, one is struck by the rarity of this examination on record. Age, of course, helps us much, but although enlarged prostate rarely occurs before fifty-eight years of age, and sarcoma is considered to be essentially a disease of youth, almost any of the other causes of cystitis may be found at any period of life.

The length of history given by the patient, even if it be correct, is misleading, as many middle-aged men regard dysuria as an inevitable accompaniment of advanced years; also a history of recurrent hæmaturia extending over three years or more need not exclude the probability of malignant disease, as papillomata notoriously tend to develop into malignant growths. We have lately had two cases of men who gave such a history, with little else to guide us, and one of these certainly has epithelioma in an advanced stage. In a series of cases recorded by the late Sir H. Thompson, the length of history of hæmaturia varied from one to six years.

The character of the pain, described by the patient, is also no true guide; thus in nearly all cases of growth or obstruction about the fundus of the bladder, the pain appears to be referred to the end of the penis, which is the seat generally given as typical of pain due to calculus. A further difficulty is introduced by the fact that various causes of cystitis may co-exist—for example, calculus and enlarged prostate. There is at present a patient in Lazarus who had a large phosphatic stone removed fifteen months ago by the suprapubic route; the wound never properly closed, and for many months the patient became quite bedridden, prostrated by continual pain and severe cystitis; to add to his misery, he developed a very troublesome sequel of suprapubic leakage, namely, dermatitis near the opening. In this condition he was re-admitted three months ago, and the sound showed the presence of a further calculus; the suprapubic incision was again opened up, and two stones were removed. For a time the patient did better, as the thorough cleansing of his bladder at the operation removed the source of pain, but as the wound showed no sign of healing, and the urethra was obviously obstructed, Mr. Lucas decided to remove the prostate, which could be felt, per rectum, to be enlarged.

The gland proved to be of the hard fibro-myomatous variety, projecting into the bladder, and firmly adherent to its capsule; portions of it were removed with the finger and forceps, and now the patient passes nearly all his urine per urethram, and the suprapubic wound is closing well.*

When we come to the physical examination of a case we are met by similar difficulties: thus a prostate which bulges into the bladder and urethra may only appear to be of normal size when examined per rectum; in the same way, a distended bladder may simulate a growth—to the examining finger. Another condition which is mistaken for growth is one of those hard sacculated hypertrophied bladders with outstanding bars of muscular tissue (cf. Lazarus 17). A somewhat rare condition, which produces the symptoms of an enlarged prostate, is that described by Mr. Jacobson as "Senile Fibrosis of the Sphincter." Sir H. Thompson records a case of this kind in which he describes a "bar at the neck of the bladder, of the simple membranous kind, not formed of prostatic tissue." Such a "bar," of course, gave rise to all the symptoms of irritation due to an accumulation of residual urine.

Again, the fallacies of sounding a bladder are many and well known: thus, an encapsuled calculus is often overlooked; a hard ulcerated surface often simulates stone, especially if coated with phosphatic deposits, as is often the case; while a thick sacculated bladder wall may give all the sensations of a malignant growth. The cystoscope may be rendered nearly useless as a means of diagnosis owing to the opacity of the fluid in a bladder when bleeding is provoked, as it frequently is, by these examinations. Sometimes, however, this form of examination is singularly successful. In a case of sarcoma of the bladder, recently operated on by Mr. Steward, a shadow of the tumour was actually seen on the anterior abdominal wall when the lamp of the cystoscope was placed inside the bladder. Valuable information is often gained as to the proximity of a growth to either of the ureters, and you will easily see that the prognosis becomes more grave if the kidneys have suffered for some time from the effects of ureteric obstruction.

* After a lapse of nearly a year, this patient has now no trouble except a slight suprapubic leakage.

The treatment of these cases is of two kinds, namely, palliative and operative. The former consists of local applications by means of washing out the bladder, accompanied by the use of drugs which act either locally (as urotropin) or generally. It is on the operative forms of treatment that I wish to lay most stress, and these includ dilatation of the urethra—or various forms of urethrotomy—for stricture; cystotomy, for growths or severe cases of cystitis; prostatectomy and lithotomy, or its alternative lithotrity. When we come to consider the question of operating on a case of cystitis due to any cause, we are confronted by a difficulty, in that the patient's kidneys are very often affected by an ascending pyelo-nephritis, especially in cases of long-standing urethral obstruction, and the point arises as to whether the existence of such a nephritis must prevent an operation being done. Sir H. Thompson was, I believe, the first to advise operation in such cases. He pointed out the impossibility of diagnosing the presence of pyelo-nephritis, owing to contamination of the urine by the septic bladder. That was before the invention of the separator, but even now we cannot go much further in that respect.

There is one sign which may be of some value, and that is the frequent association of a constantly subnormal temperature with a disorganised condition of the kidneys. In our own reports at Guy's a large number of those patients who were certainly the victims of renal disease showed this phenomenon. It is in cases of this type that a fatal result is to be feared, as fatty degeneration of the heart is commonly present. The cystoscope has also been known, as suggested above, to aid in the diagnosis of renal disease. Thus, in a case admitted recently under Sir A. Fripp for enlargement of the prostate, one ureteric opening was seen to be circular instead of valve-like in outline, and as the percentage of urea excreted was far below normal, it was thought that probably the kidney on that side had been destroyed by the so-called "backward pressure" caused by the urethral obstruction. Prostatectomy was performed in the usual way, but the patient died of exhaustion a few days after the operation. Post-mortem, the one kidney was found to be pyo-nephrotic, with practically no secreting tissue left.

Generally, however, these patients bear operations fairly well, and as without operation their condition can at best only be temporarily relieved, it is difficult to refuse radical treatment. Curiously enough, gradual dilatation of the urethra by an inlying catheter is said to be very badly borne in such cases.

Cases of acute cystitis should not be operated upon, if possible, until the condition is subsiding, as they bear a cutting operation badly. Thus, a patient was admitted last year suffering from retention with acute cystitis. Suprapubic puncture was resorted to, after other measures had failed, and after even that slight operation the patient went downhill and died of exhaustion a few days afterwards. The post-mortem examination showed that profuse hæmorrhage had occurred into the bladder, and a prostatic abscess had formed. This patient was only 59 years of age, and apparently his vitality was good—*only, his temperature was persistently subnormal.*

In most cases of long-standing cystitis it is wise to open the bladder, unless a stricture is obviously the cause of the trouble, as even if a cause cannot be found—*e.g.*, a growth, stone, or enlarged prostate—a more thorough disinfection of the viscus may be effected by this method.

Let me give you a case which illustrates this point; as it also showed many other points of interest, it is worth recording.

A feeble old man (70, I think) was admitted some seven months ago for severe cystitis of several weeks' standing; he had had urinary troubles for some years past, and from his almost collapsed condition it was thought certain that he had an ascending nephritis; he also had a markedly subnormal temperature, varying from 95° to 97·8°.

Mr. Symonds decided to open the bladder, as he did not think efficient drainage could be otherwise provided for.

Suprapubic cystotomy was performed, with the usual precautions, and the bladder wall was found to be plastered all over with a thick coat of mucus and phosphatic deposits; the urine was very foul, and there was considerable hæmorrhage from the inflamed surface; the whole of this coat of mucus, etc., was scraped off with sponges held in forceps, and the bladder was thoroughly irrigated with Thompson's fluid and drained by a large tube left in the suprapubic aperture. There was a little difficulty with the anæsthetic, but the patient bore the operation well. Two or three days later he became rapidly worse; his tongue was dry and brown, his pulse ran up, but still the temperature remained subnormal—only more so—and we all thought he would not last long. Mr. Symonds, however, said the condition was probably due to what he termed a "wave of nephritis," and held out hopes of recovery; he proved to be quite right, and the patient lived to have two or three more similar bad turns, all of which passed off just like the first one.

This patient also exhibited two more common complications of bladder operations, *e.g.*, parotitis and orchitis, both of which were attended with considerable constitutional disturbance; eventually he did fairly well as far as his bladder was concerned, but he settled down into a somewhat melancholic state, and went to an infirmary, apparently determined to be bedridden if possible.

As regards the relative merits of lithotomy and lithotrity, the latter has the disadvantage of not being able to remove the cause of calculus formation, if one be found to exist in the bladder. In old patients possibly it might be a good rule to open the bladder even for moderate-sized stones, as a slight enlargement of the prostate often causes sufficient residual urine to prove a fruitful source of recurrent calculi. Mr. Jacobson recommends suprapubic cystotomy in all cases of enlarged prostate complicated by calculus; this is *qua* prostate,

but might we not also adopt the rule *qua* stone, if the prostate is even probably enlarged, especially if lithotrity has been already resorted to, and the symptoms have recurred?

The operative treatment of vesical growths is at present in a somewhat unsatisfactory state; thus it is rarely possible to remove the whole of a malignant growth, owing to the rapid infiltration which takes place. Innocent tumours, such as simple papillomata, are fairly easily removed, but certain types of these—*e.g.*, the fibro papillomata—tend to recur again and again, and eventually cause death by hæmorrhage. Also it should be borne in mind that nearly 80 per cent. of vesical tumours are malignant, and that more than half of the pedunculated forms are malignant. (Albarran.)

On the other hand, considerable relief may be afforded by removing the projecting part of a malignant growth and curetting its base or cauterising it freely.

Thompson records some cases so treated in which the patient lived for some three or four years after the first operation; many surgeons, however, object to interfering too much with the base of the growth, as it appears to encourage a more rapid development.

The prognosis in these cases is always bad, as regards the final result, as eventually death comes from exhaustion or hæmorrhage.

Primary sarcoma of the bladder falls into a distinct class by itself, as cases are recorded in which free removal of such growths has not been followed by recurrence, at any rate for some years. In Mr. Steward's case, above referred to, a sarcomatous mass as large as an orange was removed from the anterior wall of a girl's bladder, and as yet, after fourteen months, there are no signs of recurrence, and the cystoscope shows a cleanly-healed scar on the site of the operation.

Palliative treatment for growths of the bladder resolves itself into treating the symptoms separately. Cystitis may be treated by daily irrigation with various antiseptic solutions, of which personally I have found Thompson's Fluid the most effective. In many cases, and for growth implicating the fundus of the bladder, a permanent opening may be desirable, and if this is so, the suprapubic opening, which has probably been made in exploration, may be allowed to remain patent to some extent. The constant leakage by this wound is a source of great annoyance to the patient, but it is better than the pain caused by abortive attempts of a hypertrophied and contracted bladder to overcome obstruction at the urethral orifice.

May I give a brief account of a case of epithelioma who was recently in Lazarus? He was a strong, healthy man, æt. 43, who gave a history of three years' occasional attacks of profuse hæmaturia. Three weeks before admission he had a catheter passed for retention. On admission he was found to have acute cystitis. Temperature 103°. A good deal of blood was found in his urine the day after admission. A rectal examination was inconclusive.

The cystoscope showed a large sessile growth with numerous shreds of (?) ulcerated tissue. Suprapubic cystotomy was performed, and the mass was found to surround the urethra and left ureter, and to be quite inoperable. Projecting pieces removed for examination proved to be epitheliomatous in nature. Suprapubic drainage was provided for, and the rest of the wound closed by sutures.

After the operation the growth ulcerated and grew with great rapidity, so that soon the patient could only pass a few drops of urine per urethram when he strained violently; consequently the suprapubic opening refused to close, and the condition of the bladder grew more and more foul. Hæmorrhage soon came on, and sometimes the patient passed nearly pure blood; in fact, he became very weak from loss of blood. Injections of adrenalin chloride, $\frac{1}{1000}$ solution, were given once or twice daily—℥i. in ℥ ss. of water. This checked the bleeding, and it is noteworthy that the repeated application of such large quantities of this powerful astringent caused no ill effects in the way of spasm. As time went on, the attacks of pain became more and more frequent, and when patient went out eleven weeks after the operation he was having on an average twenty attacks of severe pain in twenty-four hours, each lasting from five to fifteen minutes. I have never seen any patient suffer so severely, and the condition is far worse than is usually supposed.

Meanwhile the bladder contracted down to a hard mass, until on patient's departure it would hold barely ℥i. of injected fluid.

Latterly the bladder became very foul, as irrigation was far too painful to be practised efficiently. Morphia could not be borne, owing to the nephritis which accompanied the bladder disease, and there was practically no relief from the pain, nepenthe proving only slightly effective.

The medicinal treatment of this case consisted of purgatives and urotropin gr. xv. t.d.s. This for a long time maintained the urine at an acid reaction, and did not cause any inconvenience to the patient.

Later on, a mixture containing benzoic acid gr. x., boric acid gr. x., mag. sulp. gr. xx., was tried with fair success. It is a great point to have the bowels opened gently every day, so as not to have to resort to castor oil, or stronger purgatives, which cause straining and consequent hæmorrhage, which the patient can ill afford.

A further discomfort was added in this case by the development of hæmorrhoids, due, doubtless, to long straining and congestion of the parts round the rectum.*

I have spent rather a long time over this case as it shows how little can really be done for cases of epithelioma of the bladder. Of course, partial resection of the bladder is sometimes practised in early cases of growth, but the operation is a severe one and the mortality rather high. Cocaine injections might be tried, but if

* This patient showed remarkable stamina, and survived the operation by fully 8 months.

ulceration has advanced far the risk of poisoning from absorption of the drug is rather great. I cannot find any record of such treatment being tried at Guy's.

From the somewhat depressing subject of growths let us turn to a condition which very commonly causes cystitis, and for which a good deal can be done. I mean enlarged prostate. The question of catheter life or operation has been very fully discussed, and I would only call your attention to a few practical points about the operation and prognosis of these cases. There are, as you know, two forms of the operation, *e.g.*, partial, devised by McGill in 1889 (America), and total enucleation, advocated by Freyer in 1901. The partial operation consists in removing with the finger and forceps portions of the gland which project into the bladder or urethra. It is very suitable for irregular enlargements due to small multiple adenomata or fibro-myomata, and many good results have been obtained at Guy's in the last four years by it. Cases in which the prostate projects like a collar into the bladder have done well after a partial operation.

The enucleation of the entire prostate from within its capsule is effected by two fingers, one being placed in the patient's rectum and pushing the gland upwards. The use of a rectal bag to raise the gland is to be deprecated, as by its pressure on surrounding veins it tends to promote free hæmorrhage, as pointed out by Thompson many years ago, and Guyon later, at Guy's it is rarely, if ever, used in this operation. The type of prostate suitable for enucleation appears to be the soft uniformlv enlarged one; generally the prostatic urethra is torn away with the gland, but Mr. Golding-Bird, in 1903, succeeded in splitting the gland vertically and leaving the urethra intact; unfortunately, the patient died on the fifth day after the operation of heart failure, so it could not be ascertained how far the retention of the whole urethra might shorten the recovery of the case.

Attempts made to enucleate a hard or irregular prostate generally end in the adoption of a partial operation, but the ultimate result appears to be nearly as good.

Given a suitable case, total enucleation is a great success. Mr. Lucas performed it early this year on a man who for years had suffered great distress from his large prostate, and a complete cure was effected. The man now passes his water about six or eight times a day, and never has to get up at night to do so.

The complications of prostatectomy, or indeed of any operation on the bladder, are, firstly, cystitis, which is hardly ever avoided, and is often very severe. Secondly, rigors or a considerable pyrexia, which do not greatly affect the progress of the case; orchitis, epididymitis, and parotitis, are often met with, and an abscess may result from any of these conditions. Prostatic abscess is rare as a sequel of cystotomy, but it was found post-mortem in one fatal case here not long ago.

Local peritonitis may occur even if the peritoneum is not wounded at the time of the operation, and in one case last year it was necessary to open and drain the peritoneal cavity, which contained bloody serum, but no pus.

The other great cause of cystitis is stricture of the urethra, and a common sequel of long-standing stricture is the formation of a peri-urethral abscess. Such cases are well treated by a median incision, which can be carried down to the membranous urethra, and through which the bladder may be freely drained and washed out.

Mr. Lucas lately performed Cock's operation for a case of this kind, in which the stricture was extensive and very tight, and retention had occurred; after a few days a No. 8 gum-elastic catheter was passed by the penis under an anæsthetic, and thereafter the man did quite well; the stricture proved amenable to gradual dilatation, and when I last saw the patient the perineal wound was nearly closed.

It may be well to mention a somewhat common effect of old stricture, *e.g.*, sacculation of the prostatic urethra; some specimens in the Museum show distinct pouches in a dilated urethra, some of which communicate with the interior of the prostate, and have acted as false passages in the use of catheters.

It is not part of my work to discuss the merits of the various forms of urethrotomy, so I will leave the subject with the remark that the external forms, such as Cock's operation, succeed mainly because they give rest to the urethra, and an impassable stricture is thereby very soon rendered not only passable, but dilatable.

In conclusion, I must thank you for listening patiently to such a disjointed series of statements on a very wide and, therefore, somewhat difficult subject.

Dental News.

The Conservation Room has a very empty appearance just now, the majority of the men having gone down for the summer vacation, only those few remaining whose keenness for work outweighs the pleasure of a holiday. Considering the thermometer in this room has registered over 80° F. during the past two or three weeks they are certainly to be complimented on their endurance.

There is one case to report—"Chronic hypertrophy of the lips due to badly-fitting dentures."

Mary Hillman, æt. 36, presented herself at Dental Out-patients with large swellings inside her lips, principally confined to the upper. The swellings were normal in colour and fairly tense, and seemed to be a true hypertrophy of tissue. The history of the case is as follows:—

Twelve years previously she had several teeth extracted, ether being used once and nitrous oxide five times. Her dentures were fitted within a week of the extractions, and she was wearing her finished plates in ten days. They were fairly comfortable for the first month, then a slight rock was noticed; there was no pain in the gums however, neither was there any inconvenience in mastication. After wearing these plates for ten years, patient noticed a swelling, principally in the upper lip, but

slightly in the lower lip also; painful occasionally. She had no treatment for it, though advised to do so, but had been sent to Out-patients by the son of the dentist who made the original dentures.

Models of this case have been taken and are to be put in the Museum. She is to be treated by the removal of the whole of the hypertrophied tissue by a surgical operation.

"The Healers."

I heard of it from an earnest-minded, virulently anti-vivisectionist friend, who takes in the "Zoophilist" regularly, and thinks the "Journal of Physiology" should be put on the index. It was a great book, she said, and would show, if any showing were necessary, how absolutely disgusting some aspects of my profession were. So walking home after tea I bought it. "There's a good call for it," said my bookseller. "It's taking well."

I knew the way Mr. Maarten Maartens writes. To English readers it is an original way, and, being original, is attractive. Short, choppy sentences, a great deal of colour, the veneer of a vast amount of superficial knowledge thrown over everything, a thin plot, and a great deal of conversation that somehow doesn't help the plot much forward, are its main characteristics. I had admired "God's Fool" and "The Sin of Joost Avelingh," as literary achievements of no mean order. They, at least, were fresh, trusting to their vigour of phrase and coherency of thought and idea to charm and please. "The Healers," Mr. Maartens' latest perpetration, is something different.

To the average layman everything that pertains to medical science seems to possess an interest founded mainly on that strain of morbid inquisitiveness that runs through every man's nature. The less he knows of the subject, the more he is inclined to speculate and wander off into the mysterious. Mr. Caine ran amuck in "The Christian," in describing a kind of hospital life that existed only in his imagination, and his is not a solitary example. The temptation to make literary copy out of a subject which ninety-nine out of every hundred readers are profoundly ignorant of, and in which, therefore, he can revel to his heart's content without much fear of being pulled up by the lay critic, is one which the novelist finds hard to resist. The public likes that kind of thing—teste Mrs. Meade's popularity and the ephemeral renown of "Round the Red Lamp." So Mr. Maartens has gone and written 370 odd pages round a subject which the public likes—and knows next to nothing about. And my bookseller tells me it is taking well.

"The Healers" deals with medical life, and amongst its characters are two that appeal more particularly to medical men. The one is a shrewdly-drawn old Dutch professor of bacteriology, Baron Lisse, the discoverer of the "Semicolon bacillus." Mr. Maartens will probably be the last person in the world to see the incongruity of such a microbe: he will doubtless argue that because there happens to be a comma bacillus, it is on the cards that there should also be a full stop, a hyphen, an exclamation-mark bacillus—in short, that there exists no reason why the whole gamut of punctuation signs should not have given names to the various organisms which bacteriology is discovering.

"It is only natural," writes Mr. Maartens of the Baron, "that his own peculiar poison—his private property, so to speak, in death—became the central interest in Thomas Lisse's life. He slew many hundreds of rabbits in demonstrating how certain his microbe would be to murder a human being, if only it could once get inside. It never did. For there dwell, it appears, in the mouth of every living creature that possesses one, myriads of other bacteria which destroy the Semicolon the moment it comes into contact with the saliva. It has, therefore, to be injected direct into the blood of rabbits and frogs. During fifty long years the Professor begged, bought or stole every more or less available corpse, in the steadily increasing expectation of finding his microbe somewhere. He would shake his head and grow pathetic. "Better luck," he would say, wiping his dark-stained knife, "next time." "Oh, Jane," he insisted to his wife, "if only it could once get past the tonsils." "I wonder," mused the lady, "would it be wrong to pray that it might?"

The Professor has a son, Edward, who loathes the Semicolon, of which he gets a daily dose at breakfast, lunch and tea. On page 6 he tells his mother he is sick of the whole blessed thing.

"That I should live to hear you speak rudely of the bacillus," said the Baroness. "I wish the beastly thing were undiscovered still," retorts her son. "And your father an unknown searcher? Child, never say such a wicked thing." "Of course not, mother. Besides where'd be the good? God himself couldn't undiscover the bacillus." "Edward, do not be atheistical. If you do not love science, you can have no excuse for profanity. Your father owes to the Semicolon his position as the foremost scientist of the day."

All this is no doubt very interesting, and Mr. Maartens

means it to be amusing as well. Bacteriology lends itself well to satire for the sceptical, and Mr. Maartens is very, very sceptical. The Professor has invented a patent filtering pump. "Nowadays its construction is said to meet every requirement for the propagation of infection, but then that will be affirmed ten years hence of all our sanitary marvels of to-day."

To go on with the story, Edward lies awake at nights and moralises. "His brain wide awake—all over commas and dots"—whatever that may mean. "He had heard something of the ceaseless, measureless tortures of the modern laboratory—the serum business. Edward thought of his pets." . . . Then comes a page and a half telling us how he thought of them, in a very poetical, maundering, Maarten-Maarten's kind of way. He hears his father's injection rabbit squealing, rushes down into the laboratory and pounds it into a pulp—to put it out of its misery.

One wonders, at this stage of the proceedings, whether Mr. Maartens has ever read his great compatriot, Herman Heyermans. Heyermans has written a subtly pathetic and intensely vivid character sketch of a hypersensitive boy, the brother of a medical student, who finds his brother's work utterly distasteful. Heyermans boy and Edward are as far apart as the poles. The former is a living, real boy; the latter is a sickly sentimentalist, whose psychological analysis would baffle a Krafft-Ebing. Edward kills the rabbit, so far as one can find out, because he dislikes to hear it squeal; he has not even the broad-mindedness of the average anti-vivisectionist, who would have objected to the squealing, not on purely selfish grounds, but because of the immorality that caused it.

After the killing of the rabbit the story meanders on. The Professor calls Edward into his room and asks him to inject the Semicolon into his (the Professor's) body, because a colleague has told him that he is dying of consumption. The Professor then takes pills. "A quack's—yes. Every doctor prescribes his own medicines, and swallows a quack's. Thank heavens no deaths lie at my door but those of dumb beasts." Edward refuses to be a party to the experiment, but, as a set off, he announces his intention to study medicine. So he goes to the University, which gives Mr. Maartens an opportunity of showing his readers what he has heard of vivisection. Turn to page 30.

"We had our first vivisection this morning," said Edward, his back to his sister. "You can't imagine what it's like till you've seen it done. Do you know, I liked the work well enough. Father's right; 'tis the finest vocation on earth. Of course I knew this must come, but I thought it can't be much cruelier than shooting or angling, and I go in for those as much as ever I can. What hypocrites we are, Tommy. . . . But ah! this is a bit too awful. At the lab.—only think—they keep a whole herd of small dogs, on purpose for us to break their legs and set them again. You should see the poor wretches driven in, wheedling and whining, and trying to lick the white-aproned people's hands. They know well enough what's going to happen. And then to hear them howling afterwards." He pressed his cheeks against the chilly window pane. "I can hear them howling now."

Later on he falls in love with a Sumatran girl who believes in many "mancies." He tells her he is not going to practise medicine. "My father says that means two-thirds humbug and one-third worry. My father is the greatest bacteriologist living. I shall hope to carry on his work." To which the Sumatran girl retorts, "Oh, I know what you mean by bac—what d'ye call it?—curing people by making them ill till they don't mind it. Filling them up with disease germs instead of strengthening their vital force."

Under the Sumatran's influence, Edward goes to Paris and studies under Charcot. Here he meets with an idiot boy, with an impossible Englishman, and with several caricatures of French doctors. Perhaps it is not Mr. Maartens' fault that the idiot boy suggests, inevitably, a comparison with Sir Richard Calmady, and that the great operation of opening the idiot's skull "to make the brain expand," recalls to mind Mrs. Meade's "Stories from the Diary of a Doctor." Let us remember that the public likes to hear of debateable operations, just as much as it likes to be told absurdities about vivisection. To do Mr. Maartens justice, his is not mere hackwork. It is not great certainly, from a literary point of view, but it is not a prentice's work, this farrago of nonsense he has compiled. Some of the characters—Hortense, the French maid, Barton, the English servant, the poetical Baroness with her epic on Balaam, even the Professor, impossible as he is in some respects—are very finely drawn. Let us also be just and admit that much of his scepticism, much of his satire, is warranted. But surely it is asking too much to expect us to smile at bacteriology and to take the Sumatran, second sight, cartomancy, mediumship, and sensational-scientism seriously. Where is that sort of thing to stop? It is a relief to find that the author appears, towards the end, to realise that he is wandering out of his depths. Edward becomes an ordinary alienist, relying, apparently, more on his experience than on his wife's knowledge of the mancies. And the book ends, like most of Mr. Maartens' novels, with a page that

counts many exclamation marks and some unnecessary adjectives.

"The Healers" is not a great book. Since the *Daily Mail* has the largest circulation in these regions, I am not surprised that the public finds it a fine book. Nor am I astonished that anti-vivisectionists are enraptured with it. But it is somewhat saddening to find that so expert a craftsman as Mr. Maartens has attempted the impossible and absurd task of adding "four pounds of butter to four o'clock," and written foolish things which, if they were meant to be funny, are fatuous, and if meant to be serious merely give one the impression of being solemnly flatulent.

"The Healers." By Maarten Maartens. (Constable & Co., London.) 6s.

Change of Address.

Captain V. J. Crawford, R.A.M.C., from the R.A.M. College to Edinburgh.

Dr. John Evans, from 54, Hunter Street, W.C., to 6, Caroline Place, Mecklenburgh Place, W.C.

Captain L. Humphry, R.A.M.C., from R.A.M. College to the Eastern Command.

Dr. Arthur E. Porter, from 41, Park Square, Leeds, to Weetwood, The Wey, Reigate.

Captain J. C. B. Statham, R.A.M.C., to Pretoria, South Africa.

Surgeon-General F. W. Trevor, M.B., from Poona to the Western Command.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Papers by Guy's Men.

Ring Scotoma. By W. Ilbert Hancock, F.R.C.S. Eng.—*The Royal London Ophthalmic Hospital Reports*, June, 1906.

Seven Cases of Hernia Treated by the Implantation of a prepared Filagree of Silver Wire. By Lawrie McGavin, F.R.C.S. Eng.—*Practitioner* for August, 1906.

Appendicitis and Gangrene of the Vermiform Appendix considered as Separate Diseases. By John D. Malcolm, F.R.C.S. Edin.—*Lancet*, July 28th, 1906.

A Successful Case of Splenectomy for Rupture of the Spleen; with Remarks on the Diagnosis and Treatment of this Accident. By Graham S. Simpson, F.R.C.S. Eng.—*Lancet*, August 11th, 1906.

Some Remarks on the Treatment of Accidental Hæmorrhage and Eclampsia. By G. Bellingham Smith, M.B., B.S. Lond., F.R.C.S. Eng.—*The Clinical Journal*, 1st August, 1906.

A Lecture on Head-noddings with Nystagmus in Infancy (*Lancet*, July 28th, 1906), and A Clinical Lecture on Infantile Scurvy (*British Medical Journal*, 28th July, 1906). By George F. Still, M.A., M.D. Cantab., F.R.C.P. Lond.

The Post-mortem Flow of Lymph. By F. A. Bainbridge, M.D., D.Sc.—*Journal of Physiology*, August 10th, 1906.

The Nature and Treatment of Angina Pectoris. Prize Essay. By Hugh Barber, M.D. Lond., M.R.C.S., L.R.C.P.—*The Practitioner* for September, 1906.

An Improved Method of Putting up Fractured Clavicles. By T. Davys Manning, M.D., B.S. Lond.—*Ibid.*

Fracture in the Insane. By J. F. Briscoe, M.R.C.S. Eng., L.R.C.P. *The Clinical Journal*, August 8th, 1906.

Mitral Stenosis and Pregnancy. By Herbert French, M.D. Oxon., M.R.C.P. Lond., and H. T. Hicks, F.R.C.S. Eng.—*The Journal of Obstetrics and Gynæcology* for September, 1906.

What are the Diseases of the Stomach for which Surgical Interference may be Beneficial? By W. Hale White, M.D., F.R.C.P. Lond.—*The Clinical Journal*, August 15th, 1906.

BOOKS, ETC., RECEIVED.

Eden's Midwifery, Fenwick's Uterine Fibroids and other Pelvic Tumours, Martin's Questions and Answers on Nursing, Moor and Hewlett's Applied Bacteriology, Saundby's Treatment of Diseases of the Digestive System, Schlesinger's Indications for Operation in Diseases of the Internal Organs, Practitioner for September, Glasgow Medical Journal, The Journal of Obstetrics and Gynæcology, Brain, and Annals of Surgery.

Birth.

HOVENDEN. — On August 25th, at Kitson Lodge, Barnes, S.W., the wife of Gerald S. Hovenden, M.D., B.S. Lond., M.R.C.S., of a son.

Marriages.

SCOTT—MORTIBOYS. — On September 2nd, at St. James', Garlickhythe, E.C., by the Rev. H. D. Macnamara, Philip, youngest son of the late J. S. Scott, Esq., and Mrs. Scott, of 18, Ladbroke Road, W., to Norah, eldest daughter of F. Mortiboys, Esq., of King's Norton, Worcestershire.

SPRIGGS—GIMSON.—On August 30th, at Leicester, Dr. N. I. Spriggs, to Emily, daughter of W. Gimson, Esq., Rothesay, Leicester.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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To the New Chums.

"And now, gentlemen, Pax vobiscum, as the ass said to the cabbages. Pray walk this way, and don't hang your heads. For this once let us not be loud, but pathetic. . . . Therefore, let not each play upon his instrument as if it were the only one in the universe, but gently, and with a certain modesty, according with the others."—THE SPANISH STUDENT.

CUSTOM, which bears upon this fortnightly as heavily as the Fates fastened upon Æneas, has decreed that there should be extended to you, the new Freemen of the Foundation of Thomas Guy, a couple of pages of initiatory welcome, advice, and moralising. It presumes, perhaps unnecessarily, that the GAZETTE should adopt towards you the attitude of the famous Mr. Brown, and say, in a slight paraphrase of the welcome of that excellent gentleman to his nephew Bob, "Now, then, that you are a member of Guy's, I trust you will comport yourself with propriety in the place, and permit me to offer you a few hints with regard to your bearing." In its way it is a wise custom. It allows us to point out to you how choice has been your decision in selecting this Hospital and its Medical School as a final caravanserai before you set out upon the way that leads, let us trust, to fame and success: to impress upon you the greatness of the profession you have chosen, and ultimately to express our conviction, at fuller length and in greater detail than a mere paragraph permits, that you will, individually and collectively, come to shine as bright stars in the admirable galaxy of talent that Guy's has already given to the medical world. Affording, then, as it does, such a magnificent opportunity for us to be cordial to you and congratulatory to ourselves, we would be the last persons in the world to deprecate this custom which puts so much space at our disposal for our united benefit.

In the first place, therefore, "Pax vobiscum," which greeting, please to observe, we do not extend to you in the selfish, one-sided manner of Chispa's ass, but in the cordial, friendly fashion of one Freeman towards another, of Guy's man to Guy's man. For, with your entry into our little world, you are become part of us. What that means the Green Book and the pamphleted information which you have doubtless obtained at the Medical School office, will have told you in sufficient measure to feel that it is something, after all, to be a member of our family circle. Should you wish more direct information regarding the history and achievements of our great Club, you cannot do

better than devote half an hour's spare time in the Library to the study of Sir Samuel Wilks, and Mr. Bettany's biographical story of this Hospital. We welcome you among us as fellow-students, as members of our various societies and clubs, and last, but not by any means least, as comrades with whom we trust we will become better acquainted in the near future for our mutual welfare.

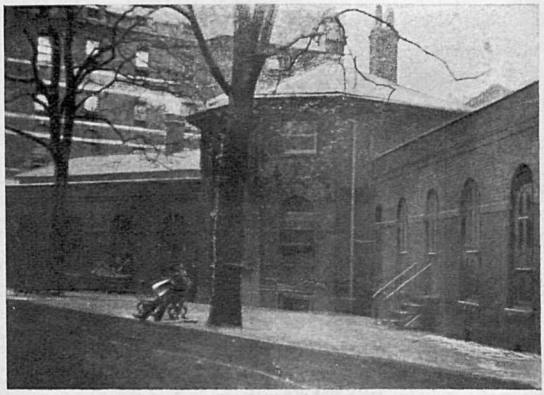
It is possible that during the first few days of your sojourn among us you may find ours a strange world, just as it is possible that you may find it somewhat difficult to make your way from the smoking-room to the Physiological Laboratory by the shortest possible route. But we are not more stiff and stand-offish than the Polyanthus was, and after the first week you will no doubt have realised that our welcome to you was sincere and not merely perfunctory. Perhaps you will never, during the whole course of your career here, obtain a correct knowledge of the minute anatomy of our underground passages and nooks, but if you attend, as we cordially hope you will, the opening dinners, the monthly debates and periodical meetings of our numerous societies, there is no reason why you should not, in a very short space of time, get a sound working acquaintance with our community. And we would like to impress upon you the importance, both for yourselves and for us, of acquiring that latter knowledge as speedily as possible. Are you a speaker, a debater, one that "argueth bravely into the infinitesimal?" Then the secretaries of the Debating Society will, metaphorically speaking, embrace you for joy at getting an addition to their parliamentary ranks. Do your inclinations lie in other directions? Well, there are the Football and Cricket Clubs, the Glee Club, the Rifle Association, the Physical Society, the Hockey Club, and others for you to choose from, each and all of which are eager to adopt you into their respective circles. Bear in mind that the secretaries do not know what you are capable of, and that it is a false modesty that forbids you meeting them halfway, and be assured that your advances will be gratefully and cordially welcomed. Play upon your instrument, not indeed as if it were the only one in the world, and certainly with that degree of decorum which we take it for granted you possess, but let us hear your playing and judge for ourselves as to your proficiency.

There is no occasion for us to offer any remarks or hints "with regard to your bearing." The very fact that you are here is sufficient guarantee that you have taken into consideration the several weighty matters which should be regarded by anyone who ventures to embark upon medicine as a career in life. We presume that you are fully aware of the importance of the step you have taken, and we will not insult you by repeating for your benefit the modern versions of Polonius' advice to his son, or of Chaucer's injunction to "Weyvé thy lust and let thy ghost thee lede." Nor will we imagine that you have come to us in the hope of finding at Guy's the counterpart of that wonderful machine which existed in the academy at Lagado, which enabled the veriest dunce to become a professor of all the sciences in a few days' time. You will find that there is no royal road towards learning anatomy and physiology, any more than there is towards becoming proficient in pedagogy or astronomy. Such advice as we can give you will be found in the present issue, by those who are qualified to give it, in the several branches of study you will have to deal with, and these articles we commend to your careful consideration. For the rest, experience and your own judgment will teach you more than the most prodigal advice that we, fellow-students with yourself, can offer.

Finally, once more we bid you welcome. Whether you are here for five, for six, for three or for more years, we sincerely trust that your time at Guy's will be both pleasant and profitable to you, and that a part of this pleasure and profit may be ours as well. The majority of those who enter our gates look back with a glance of regret when they depart from our Foundation, and the best wish that we can express is that, when your final is over, your house-appointments are ended, and the cab is waiting for you in Maze Pond, your delight at finishing your career as students of Guy's Hospital may be tempered with a feeling of regret that such finish means the severance of your intimate relations with us.

Views of Guys Hospital

from Photographs by Miss Smith.



"Clinical" from The Park

College from the Park

Clinical

Colonnade

Passim.

THE passing away of Mr. Beit has been very quickly followed by the deaths of two other Governors of the Hospital, viz., the Earl of Leven and Melville and Mr. Rodolph Hankey. Lord Leven was the third representative of his family that had been on the governing body. He was elected in 1889, and, though not much seen about the Hospital, always took a kindly interest in all that was going on. He was a liberal donor to its funds, and his great influence in the City, where he was a banker and, at one time, on the Direction of the Bank of England, was used to the advantage of the Institution during the various appeals that have, of late years, been necessary on its behalf. Mr. Rodolph Hankey, of the well-known firm of Thomson Hankey & Co., of Mincing Lane, joined the Governors in 1893, and throughout the thirteen years that have since elapsed showed the utmost interest in all that concerned its welfare. His attendance at the House Committee was exemplary, rarely missing any occasion of its meeting. He, too, like his colleague, Lord Leven, was most liberal in his support of the Hospital and its various interests. Towards the recent decoration of the Chapel his donation was one of the largest received, and his generosity towards the Children's Home and Clubs' Union was conspicuous and constant. We trust that their places may be filled by others who will follow the example set by those whom we now so much lament.

THE opening meeting of the Pupils' Physical Society will be held on October 13th, at 8 p.m., in the Physiological Theatre, when Professor Clifford Allbutt, the Regius Professor of Physic at Cambridge University, will read a paper entitled, "On Words and Things." The chair will be taken by Sir Samuel Wilks, the Honorary President of the Society. Previous to the meeting a dinner will be held in the College, at which Mr. Cosmo Bonsor has kindly consented to preside. The dinner will be at 6.30. Tickets (3/6) can be obtained of the Secretaries, Dr. Bell Walker and Mr. Mollison, the Presidents and the Caterer. Only a limited number can dine, so that early application is advisable. We would strongly urge on all students, and particularly new men, the desirability of attending the opening meeting of this old society, and of regularly attending, and taking an active part in, its meetings during the coming session.

ON the 27th inst. four members of the Nursing Staff are leaving us to take up their duties in another quarter. They are Sister Lilian (Miss Tippitts), Sister Lydia (Miss Newton), Sister Charity (Miss Morah), and Miss Smith, formerly Head Nurse in Addison, and they go to India to take up responsible posts in the Government Hospital at Lahore. Their association with Guy's has in each case been a lengthy and worthy one. Miss Tippitts, who for some time past has been acting as Assistant Matron, was one of the first to volunteer for active service in South Africa during the late war, and was, we believe, indeed the pioneer of that band of civil nurses who did such yeoman service in the field hospitals. They will carry with them the best wishes of every Guy's man for their success in their new sphere of labour.

IN the last issue of the GAZETTE we were guilty of a grave error of fact in stating that the rejuvenated dissecting-room did not possess an electric light installation. We hasten to correct the error by stating that it does possess such an installation. No less than sixteen lights have been put up, each swinging above its own table, and in addition there are a few wall lamps. The old gas lamps, which still remain, will be taken down before the end of the vacation. The electric light has also been put up in the adjoining theatre, in the demonstrator's-room, in the injection and in the pickle-rooms, though the operative surgery room appears to have been overlooked. That it will prove a boon and a blessing, far greater than the Owl and the Waverley pen, everyone who works in that quarter of the building will admit, and we owe our apologies and congratulations to the Medical

School, both of which we tender to the authorities—the one for failing to notice the improvement before, and the other on the fact that the improvement has at last been effected.

IN this issue the new man will find full particulars of the various Clubs and Societies which demand his attention, his support, and his help, while he is a student at the hospital. The Musical Society, a body which includes the Nurses' Choral Society, the Orchestral Society and the Glee Club, asks his co-operation and assistance. So, too, does the Chapel Choir, particulars of which are to be found in the Hon. Secretary's letter in this number. Both these bodies, excellent as they are at present and flourishing, can find room for new talent, and the secretaries will be glad to hear from any of the new men who are desirous of joining their forces. Then there are the Swimming Club and the Rifle Association, both of them at present recruited from a comparatively small band of enthusiasts who, we are sure, will cordially welcome all new men who wish to enrol themselves. In addition, there are two other clubs, neither of them just now flourishing, namely, the Cycling and Chess Clubs. Both of them can easily be resuscitated, strengthened and put on a firm footing, if the secretaries are energetically supported. We would impress upon new students the necessity of coming forward, and thus enabling the secretaries to become acquainted with new members from whom their various teams may be filled up.

THERE is one other society which, as it is not a constituent unit of the Clubs' Union, does not get a page for itself in the Blue Book. We refer to the Students' Physiological Society, which meets periodically in one of the Physiological Class-rooms for the discussion of original papers. To men in their first and second years, the advantages offered by this society are valuable and important. Its discussions are generally instructive and interesting, and the papers read before it sometimes attain a high degree of excellence. Printed programme cards for the ensuing session may be obtained at the first meeting, and notices of subsequent meetings are usually to be found posted in the Colonnade, Smoking-room, Dissecting-room, and on the notice board at the entrance to the Physiological buildings. The society offers a prize for the best paper read before it during the session, and in addition—an inducement which may appeal to some of us—provides tea and biscuits and tobacco as a preliminary to every discussion.

Appointments.

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants.—Messrs. G. N. Bartlett, W. H. S. Burney, H. C. Malleson, W. H. Miller, Richard P. Rowlands, H. F. Vandermin.

Clinical Assistant in the Medical Out-Patients.—Mr. J. L. Rankine (Dr. Shaw and Dr. Beddard).

Dressers in the Throat Department.—Messrs. G. W. Goodhart, J. H. Mayston, E. Morgan, W. P. H. Munden, J. L. Rankine, G. F. Stebbing.

Assistant Surgeons' Dressers.—Messrs. H. R. Mullins, H. Chapple, H. O. Brookhouse, S. S. Brook (Sir Alfred Fripp); A. E. Lees, H. E. H. Mitchell, K. H. Hole (Mr. Steward); H. Shahin, L. Mandel, V. P. Hutchinson (Mr. Fagge); H. A. Sanford, P. S. Price, D. Allan (Mr. Rowlands).

Medical Ward Clerks.—Messrs. F. J. Cutler, P. V. G. Pedrick, G. F. Syms, J. B. Dunning, H. B. Carter, W. Johnson, E. L. M. Lobb, E. P. L. Hughes, F. J. Wheeler, E. R. Stone, C. S. E. Wright, J. Walker, H. R. Bastard, B. McDermott, A. D. Vernon Taylor, S. H. Browning, H. W. Heasman, H. I. Janmahomed, V. Townrow, C. F. Searle, F. J. Kolaporewalla, H. Lee, W. E. Wallis, A. E. Rayner, S. L. Randolph, T. Stansfield, A. R. Khalakdina, D. C. Druitt, H. C. Lucey.

Surgical Ward Clerks.—Messrs. A. A. Greenwood, M. M. Cowasjee, R. A. Rankine, H. B. Kent, L. W. Evans, R. G. Oram, S. J. Darke, A. H. Crook, R. C. H. Francis, C. C. Holman.

Post-Mortem Clerks.—H. J. Henderson, K. H. Digby, E. P. H. Joynt, C. H. Rippmann, H. J. B. Cane, J. W. Grice (October 1st); M. R. Dobson, C. H. Marshall, J. B. Dunning, H. F. Joynt, C. F. L. Leipoldt, F. Morres (November 16th).

Clerks in the Skin Department.—Messrs. E. P. H. Joynt, H. F. Joynt.

"Signing Up."

To the "Man in the Park," to paraphrase the cant expression of modern journalese, his "signing up" is usually a nightmare and an oppression, and it may therefore not be out of place in a Students' Number of the GAZETTE to instruct the newcomer as to the meaning of the phrase, and its significance.

The system of appointments at Guy's is conducted in a manner which differs from that obtaining at other medical schools. Appointments are given to candidates in order of merit if possible, but the method of arriving at the proper order is neither that of competitive examination, nor, as occurs elsewhere, by personal application to, and support from, any individual member of the Staff.

A record of each student is kept in the Medical School Office, and on this is noted his attendance at lectures and classes, his School and other successes, and the opinion formed of his work and abilities by each member of the Staff under whom he works. This opinion contains two factors, personal characteristics being excluded; firstly, the student's punctuality or regularity of attendance, and secondly, the character of his work when he is present. Finally, the record bears, if the student is wise and sees to this essential at the earliest possible opportunity, his *photograph*. Many a man has lost an appointment because his photograph was not on his record, and a member of the electing body who would have known his face has not sufficiently remembered his name alone.

This record, which is kept in the Medical School Office, is, for obvious reasons, not accessible to the student.

Appointments to all posts which are held by students, up to and including that of Clinical, are made by the Treasurer upon the recommendation of the Medical Council, which is elected annually by the School. This body contains representatives of all departments, and of all periods of the curriculum, the Registrars and the Dean always being on it *ex officio*; meeting nearly once a month, the Council considers the applications, selects the candidates who appear most suitable, and recommends them to the Treasurer, who may or may not accept the recommendations.

Recommendations for all resident appointments are made by the House Committee upon the recommendation of the Medical Committee, a body consisting approximately of all the members of the Visiting Staff.

It will be seen from the outline sketched above that the factors which may influence the appointment of any individual are numerous, for there are taken into account his School and other successes, his own personal recommendation of himself as written upon his countenance (his photograph), and his "signing up," which has always a great influence upon the Council or Committee. In addition to these factors, there is one factor which is constantly changing, *i.e.*, the actual composition of the electing body on any particular occasion.

With all these precautions, popular opinion, as represented by the "Man in the Park," does not always agree with the recommendations of the Council or Committee, and favouritism or neglect is freely urged by the opponents or friends of any particularly successful or unsuccessful candidate as the case may be. "We could all have done it much better, and the Council ought to have known that So-and-So was a rotter"—and so forth. There must be mistakes, it is true, for all human beings are liable to error, but consideration will show that it is the great aim of the elective bodies not to make a mistake. They have a much more lasting interest in the Hospital and School than the ephemeral student, and an incompetent person in a responsible position is quite as great a misfortune for the Hospital as the failure of a deserving student to obtain his appointment.

It is computed that each so-called "Hospital Scandal," which is often merely a matter of tactical incompetence, costs the Hospital about a thousand pounds by loss of subscriptions and legacies that might have been made during the time that the echoes of the scandal are reverberating through the halfpenny press, and it is therefore essential that, as far as possible, no unsuitable candidate should be elected.

Of course, it would be much easier to judge of a man's suitability for an appointment after he had held it, for it is much easier to tell what sort of a House-Surgeon a man will make when he has completed the appointment than before he has commenced, but such a Gilbertian method is impossible, and all appointments must, in the nature of things, be a decision made upon probabilities only.

It is also often the opinion among men that "kissing goes by favour," and that perfervid attention to Mr. A. or Dr. B. will immediately procure its worldly recompense. A glance at the mechanism outlined in the opening of this article will suffice to dispel such fancies which are often merely bred of the debonair exterior of the deceptive person in question. No single

person can make or mar a student's career; most of the Staff, having been students themselves, can spot a time-server when they see one, and for one villain that succeeds many are detected. The only safe course is to do your work thoroughly at all times, and under all masters, great or small; you can then regard the dreaded record in the Janitor's keeping with equanimity, and judge of its accuracy by your merited success. For signing up in the microcosm of the Hospital is only a foretaste of the larger world outside. There everyone will always, metaphorically speaking, be "signing you up"; you will never be able to see the record, and your means of ascertaining its severity or kindness will be your own failure or success.

The 1st of October.

WELL, what is to be thought of it? Without any idea of preaching, it may be fairly said it is a highly suggestive milestone in the life of many a Guy's man. Forty-five or fifty years ago, "to enter" was, indeed, a process. Accompanied by his father, or next friend, the would-be student —a future Astley Cooper or Gull—made his way, about the end of September, to the little office—now part of the Dispensary premises—where reigned, in solitary state, "the Apothecary," a kindly man, and withal a gentleman to his finger tips, Mr. James Stocker, who received you with a dignified smile and an inquiry after your general health. Certain monetary transactions having taken place, a prospectus was placed in your hands, and with a quiet whisper into your ear of "You'll do," the "student" now "entered" upon his fateful career.

To attend the "Introductory" was good form, such lecture being given by a member of the Staff, though a Treasurer of the Hospital, Mr. Thomas Turner, in his day (1857), showed admirably what a layman could say to budding medicos; while specialists, of the type of James Hinton, could astonish his fellows by the delivery of such an oration as "Man and his dwelling-place." One of the last Introductory Lectures was given by the late Sir William Gull. The crowd to hear him was so great that it was found impracticable for half who were so entitled to enter the Theatre. An adjournment to the Ball Room of the Bridge House Hotel was decided on, and the unwonted spectacle was witnessed of a surging crowd of doctors, students and the general public marching across the Borough to the cries of "Sawbones!" from the local gamin.

The student of that period was a younger man than those of present day entries. Sumptuary laws were to the front. No bowler hats or brown boots in those days! A man who didn't come down in a top hat was thought to be "a cad," and a grand rumpus in 1873 was brought about by a man wearing a white silk necktie, and only settled in solemn conclave by the President and Treasurer.

The janitor—dear old Goldstone—took a fatherly interest in all the "boys," and when not urging them into the "right path," was diligently probing the various hospital gullies with his long walking-stick. He was gathered to his fathers in his 85th year, at the "Janitor's House," on a site now opposite the College. A curious dispute arose at his death, having died at midnight on 31st December, 1865—or, as some would have it, on the first minute of the new year—the registrar claiming the case for the old one!

The large number of Welshmen was a noticeable feature of the entry. The present generation of "Taffy's" don't get quite so jovial at the "Black Bull," in Holborn, on Sunday nights (mistaken for the Welsh Chapel in Ely Place, adjoining); nor, do they vent their feelings on their Derby-day losses by securing the night watchman to one of the trees in the park and turning the hospital hose on to him; such things look all but respectable through the long years that have passed.

Let us trust that the "1st," this year, may, in days to come, be looked upon by many as a "happy time," and that the dear old place may always find a fossil willing to recount his past recollections of the date.

Papers by Guy's Men.

On Opsonic Factors: their Estimation and Use in Therapeutics, with some Illustrated Cases. By Ronald E. French, M.A., M.B., B.C. (Illustrated)—*The Practitioner* for July, 1906.

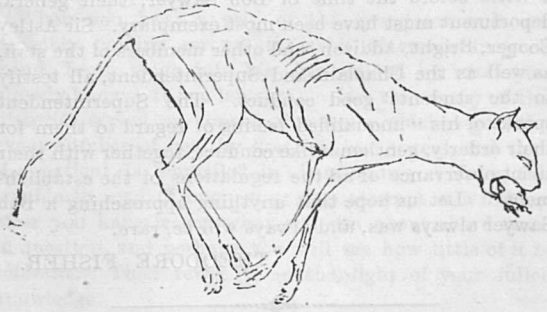
Fifty Cases of Labour Complicated by Organic Disease of the Heart, from the Records of Queen Charlotte's Hospital, with a Note on the Blood Pressure during Pregnancy. By Percy Ingram, M.B., B.S. Lond., and C. Nepean Longridge, M.D. Vict., F.R.C.S. Eng., M.R.C.P. Lond.—*The Journal of Obstetrics and Gynæcology* for September, 1906.

Another Discovery at Cobham.

On entering the village of Cobham for the first time, one is conscious of a sense of restful satisfaction, which, happily, it is still in the power of many of the quiet country villages of England to bestow. The peaceful beauty of the whole, the suggestion of promise, when examined in detail, of the presence of objects of varied interest, while perhaps pervading all a hazy recollection of some historical event or literary association, these combine to provide a considerable degree of harmonious pleasure to the artistic, intellectual, and sentimental sides of our nature. What historical or literary recollections there may have been in the mind of Mr. Pickwick when he entered Cobham is not recorded, but it certainly appealed to his sense of beauty, for he expressed the opinion that a visit to the village by anyone tired of life would cause "attachment to this world very soon to return." But he found more than beauty. It was here that he discovered the stone with its mysterious inscription, that was to make his name famous amongst the learned. At the door of the "Leather Bottle," to which Mr. Pickwick conveyed his highly-prized "find," we stopped our cycles with the two-fold object of refreshing our bodies, and interesting our minds.

A recent writer has said that "there is in everybody a certain thing which loves babies, fears death, and likes the sunlight—that thing enjoys Dickens." The worthy landlord of the "Leather Bottle" was evidently not devoid of some liking for babies; as the sounds suggestive of his dancing a jig with his infant daughter somewhere in the region of the kitchen testified. Neither can he have been very averse to sunlight. At least it was evident that the mid-day sun of a cloudless sky on one of our hottest days was incapable of depressing his spirits. What was the measure of his fear of death was, no doubt, hidden within his own breast, but probably there have been times when he has looked at the shadow of the church tower as it passes across the old church-yard in front of his white abode, and has thought sadly, with the author of Pickwick, of the many that are gone who must have seen the same shadow, and how it spoke to them, as it speaks to those still living, of the resistless flight of days and years. But whatever may have been our ideas as to the leading sentiments of the landlord of the "Leather Bottle," there could be no doubt, when once we had entered "the clean and commodious village alehouse," that Dickens had not been neglected. Framed pictures of the writer himself, and of the characters that he has made familiar to us all, were to be seen on every hand. We left the passage for "the parlour," where Mr. Tracy Tupman had been found enjoying, in spite of his expressed desire to leave the world, a meal of roast fowl, bacon, and ale. Pictures similar to those seen elsewhere in the inn adorned the walls, but in one corner was a decoration of somewhat different character.

In a glass-fronted case was a dried cat with a dried rat in its mouth. A cat reduced to skin and bone (even the hair having disappeared) is not a beautiful object, but this particular cat had an interest for me, because I have been familiar with a similar dried cat holding a mouse instead of a rat in its mouth, which had been discovered at the time of restoration of one of the Bristol churches. During our inspection of this curiosity, the cheery, active, never-at-a-loss-for-a-word landlord made his appearance. We asked where the cat had come from, and received the answer that many years ago it had been found in the church, and thus learned that in more than appearance it resembled its Bristol representative. "How," we further enquired, "did it find a resting-place in the inn?" This was considered easy of explanation. The inn, next to the church, was the most important place in the village; "Where else could it be put?" "How long had it been in the church?" "Goodness knows," was the reply, "it might have been there when Julius Cæsar marched his Roman legions through Cobham." "How did it meet with its death?" Now, according to our informant, we had certainly asked a question he could not answer. There was some half-expressed suggestion as to judgment having fallen on the rat for eating crumbs of the holy wafer, but ideas being a little mixed as to whether judgment had affected chiefly the cat or the rat, the subject dropped.



This question as to the cause of death of the cat, however, is of some interest, and, it may be added, mystery, at least to those devoid of special knowledge regarding the existence of dead cats in churches. The reason for their presence is one of those enigmas for which it is tempting, by the exercise of the imagination, to find some explanation. The conclusions probably that most persons arrive at when looking at either of the cats referred to, is that the rat or mouse was seized in some situation from which the cat found itself unable to extricate itself, and died in that situation, failing even in death to release its hold upon its capture. The position of the legs, which is similar in both instances, does not, however, suggest the death of the cat in some confined space, and it is difficult to believe that a cat dying of suffocation would still retain a mouse or rat in its mouth. Imagination alone, however, with nothing but the cat as a guide, does not appear likely to furnish

a satisfactory conclusion. It would seem to be necessary to know precisely various details of the situation in which the cat was found. Another suggestion, although not the only one that can be made, is that as the outcome of some superstition, the dead cat, with a dead rat placed in its mouth, was intentionally secreted in the church during building operations. Possibly some readers of the GAZETTE, possessed of antiquarian knowledge, may be able to give information on the point. Such cats may or may not be familiar to antiquaries, but however that may be, there must be many Guy's men interested in relics of the past who have visited the old church at Cobham with the object of examining the remarkable collection of sepulchral brasses which it contains.

Close by, but not visible from Cobham, is the valley of the Medway. This, in the lower reaches of the river, is disfigured by lime and cement works, but becomes more truly rural towards Maidstone. It was in the valley of the Medway that Manor Farm is said to have been situated where Mr. Pickwick first met a character—Bob Sawyer—of whom Guy's would scarcely be inclined to boast. In the days of Bob Sawyer there no doubt were, as there probably will be at all times, students who did not take life seriously, and had little desire to maintain any personal dignity, or the dignity of any institution with which they may have been connected, but if we are to believe some statements given in the "History of Guy's Hospital," as to the behaviour of students in this hospital a little before the time of Bob Sawyer, their general deportment must have been most exemplary. Sir Astley Cooper, Bright, Addison, and other members of the staff, as well as the Chaplain and Superintendent, all testify to the students' good conduct. The Superintendent speaks of his "unqualified feeling of regard to them for their orderly, gentlemanlike conduct, together with their strict observance of all the regulations of the establishment." Let us hope that anything approaching a Bob Sawyer always was, and always will be, rare.

THEODORE FISHER.

Papers by Guy's Men.

Some Observations on Convulsions in Children and their Relation to Epilepsy. By R. O. Moon, M.D. Oxon., M.R.C.P. Lond.—*The Lancet*, 15th September, 1906.

Urinary Calculus and its Detection with the X-rays. By Edward W. H. Shenton, M.R.C.S. Eng., L.R.C.P. Lond.—*Ibid.*

Report on Return Cases of Scarlet Fever and Diphtheria for the three years 1902, 1903, 1904. Metropolitan Asylums Board. By F. Meadows Turner, M.D., B.C., B.Sc.

Variations in the Hydrochloric Acid of the Gastric Contents in Cases of Carcinoma in Man. By F. W. Morton Palmer, M.A., M.D., B.C.—*Bio-Chemical Journal*, Vol. I., Nos. 8 and 9.

On Professional Education.

NOT long ago the distinguished Regius Professor of Physic in the University of Cambridge was moved to put aside for the nonce his proper duties and to journey into the fields that lie about Parnassus. He had been distressed, as many of us have been distressed, to note the uncouth language with which his professional brethren set out their precious discoveries and mature opinions. He saw their weakness and longed to strengthen it, so gathering his academic robes about him he hastened to bring a torch to their darkness and to lead them from their quagmire of ignorance to the flower-set lawns of literary appreciation. A praiseworthy rescue indeed, and a bold, remembering the connection between a cobbler and his last; yet on that score we say nothing. Our complaint is that whereas in the past the Professor's cultured style and limpid flow made it delightful to turn to his contributions from laborious perusal of others' efforts, now, since reading his confessions in "Notes on the Composition of Scientific Papers," we find ourselves approaching his articles with ears pricked and eyes alert for artifice and stratagem. Then, we felt the cadence of his periods natural as a purling stream; now he has made us realise that his effects are made and he has shown us the manufacture of his sentences. Of course we vaguely guessed as much before—even a Stevenson needed to prune and polish—but then he had not told us, and there is the difference. Which proves once again that art must at all cost hide itself.

However, in his new book, "Professional Education," he spreads so much that is wise that he goes far to overcome our initial critical spirit, and we are able to attend to his substance without keeping an eye on his style. The subject of the book was selected for an address at King's College, London, last year, and deals with medical education from a broad standpoint. There is in it much that might profitably be taken to heart by the reverend signors who set the curriculum of our students. The important point in all education is not *what* you teach a man, but *how* you teach it, and in science you have to cultivate the imagination as well as the intellect. Further, it is of little value to instil knowledge if at the same time its practical application is not shown. The man who stores vast information is a useless member of the community compared with him who, of little learning, applies what he knows to practical ends. *Eruditio in usu.*

These are the hinges on which our professional education must turn, and to them Dr. Allbutt draws prominent attention. In discussing the narrower issues of the subject, he writes strongly on the futility of the arrangement which makes a student devote the greater part of his time to preliminary subjects and leaves him barely a couple of years to acquire his clinical knowledge. Fortunately, the feeling on this point grows, and a more reasonable division of years is not improbable.

Professor Allbutt discusses in turn university education, the "one-portal" system, and graduate study, and incidentally inserts some interesting comments on the uselessness, the more than uselessness of much of the work that goes by the name of "research" done at the present day. Then he gathers in the threads of his discourse and weaves them into a picture of the future of medicine. He foretells the day when it shall have ceased to be narrow and anthropocentric, and shall have expanded to a science of comparative medicine, recognising that man and animals are one beneath the processes of physiology and pathology.

The book appears opportunely, and the few hours required to read it are well spent. There is scarcely a page without some idea, some suggestion, worth turning over and over in the mind.

"On Professional Education." By T. Clifford Allbutt, M.A., M.D., F.R.S. (Macmillan & Co., Ltd.) 2s. net.

The Medical Report.

THE history is the first and a very important part of a report, for the conclusions to be drawn from a really good history may be incontrovertible. Further, since physical signs nearly always mean a considerable lesion, it is ever our object to be in the field before them, to study carefully symptomology, and especially the progress of the symptoms, that is, the history. It is regrettable to see how often this part of the work is neglected; how often only sufficient inquiry is made to enable the investigator to decide what part of the patient's anatomy shall be examined.

Let the patient tell his own tale in his own manner, and as he is not a witness don't be continually pulling him up with "Answer my question." Avoid leading questions; it is useless to ask a man if he has had acute rheumatism or influenza. Say, rather, "What illnesses have you had?" and when he replies "Influenza," get him to describe it, for it is quite probable that your conception of influenza is not quite the same as his. In short, draw what conclusion you can from his description of the illness, but don't accept as gospel his nomenclature. First get him to tell you what is the matter with him, and then lead him gently on from this, directing his train of thought rather than dragging him into yours. If he is keen on his cough back him up until you feel that you know as much about it as he does. Let each question you ask him follow as a natural sequence his previous reply; it is useless to attack him with a list of disconnected questions, expecting him to answer "Yes," or "No"; and don't change the subject too abruptly; he may fail to see the connection between his own complaint and what his grandmother died of. and mentally discount you accordingly.

It is not sufficient to get a mere list of his symptoms: you want to know about the onset, duration, and relative severity of them. And it is here that your powers of discrimination will be required to decide what is and what is not important, for the list of symptoms may very well be the same in very dissimilar conditions, whereas their grouping and relative significance may differ widely in the two conditions. Be very careful definitely to locate that very important symptom—pain, and as your patient probably has not at command such terms as epigastrium or hypochondrium, it will save time to ask him to put his hand where the pain is, and in this, as in other symptoms, his manner while telling you about it will be a better guide as to its nature than any adjectives he sees fit to qualify it with.

When you have a grip of the symptoms and are probably holding several tentative diagnoses in your mind, begin to go into his past, guided by what you already know. It is a lamentable fact that many of the histories served up consist of measles, chicken-pox, the exact number of healthy brothers and sisters, and that the patient is domiciled in Bermondsey. Take the trouble to read through your first attempt at a history after you have learnt what you can about the disease in question, and perhaps you will see how little of it is relevant. Then revise it in the light of your fuller knowledge.

In babies always go into the question of diet, for errors therein are at the bottom of many of their ailments, but don't over-rate their idiosyncrasies, contortions of hands, feet or face, as described by the mother. Normal babies generally have little peculiarities of this nature. In older children inquire carefully about the specific fevers, especially scarlet, measles and whooping cough. For instance, nephritis in children should always suggest scarlet fever, and if you remember this you may have the satisfaction of discovering that the child is desquamating.

In every case ask about the symptoms of acute rheumatism, tuberculosis, and syphilis, both in the individual and his immediate relations. Add to these malignant disease, and you will find, but for them, that most of your beds would be empty.

The bare knowledge of what the patient's relatives have died of is not a satisfactory family history. Here you are treading upon the vexed question of heredity,

and those obscure somethings, constitution and predisposition, come in. The family history will only very occasionally bear upon diagnosis, but may indicate how a patient is to be expected to react to an infection, or at what period of life and in what direction he may show signs of decay. And here it will be, in diseases styled nervous, that hereditary influences will be most obvious, perhaps because nervous instability reveals itself in manner and function very readily, and is therefore more apparent to us than the shortcomings of other parts of the body. A real history is a big business, difficult to get and to estimate, and perhaps more difficult still to record. While you have been talking you will have noticed, unbeknown to him, any obvious peculiarity or abnormality. Record these as the beginning of your "condition on admission." Next put down the pulse and respiration rates, and the temperature. You now come to what I fear is usually considered the business of the day, the examination of his systems. Strictly speaking there is but one system, but for the purposes of description you investigate, seriatim, his circulatory, respiratory, alimentary, uro-genital and perhaps tegumentary system. Describe first the system most likely to be at fault, judging from symptoms and appearances, remembering, however, that the physical signs and symptoms do not necessarily run a parallel course; for example, a patient can have shortness of breath without having any disease of his lungs; he may be suffering primarily from some quite remote lesion. In investigating any system, you inspect, palpate, measure, percuss, and auscultate, as far as it admits of these, and you usually do so in the order given. And it is well to bear in mind that in man sight is the dominant sense, so learn to rely chiefly on it. The stethoscope is all very well, but it is not the whole of medicine.

Be very exact in your statements, especially in regard to observations. When you want to indicate a given point on the surface of the body, measure it from some adjacent fixed point. To say that the cardiac impulse is in the fifth left intercostal space two inches from the left border of the sternum, is a fact that will remain good for all time. On the other hand, to write down that the heart is normal is *your* deduction and valueless to the investigations of others. Learn to rely on your own observations. No two men will make a cardiac dulness quite the same, but this is not a matter of such great moment as to be sure, for instance, that according to your method of observation the heart has increased an inch to the left since you last examined it.

In going over the lungs, carefully compare one side with the other. Differences of note or entry on the two sides are more important and reliable than any absolute standard of dulness or breath sounds. A lung is open to examination on three of four aspects, the anterior, external or axillary, and the posterior. Carefully examine it in the axillary region, not forgetting to go high up into the axilla, for here the lung is only sparsely covered and the sounds are well conducted.

When you get a chance, look at the fundus oculi, and don't forget the ears, throat and nose. Describe any vomit or sputum there may be, and the fæces, too, if there is any reason to suspect abnormality. Do not be over anxious to apply the various diagnostic apparatus at your disposal; but, above all things, cultivate your own sense impressions.

It is also necessary to record the progress of the case and its treatment. Within reason go over acute cases every day, and chronic cases once a week. Do this with regard to the part diseased as carefully as if it were a new case, and with as little bias. Enter the treatment as it occurs. It is of no value to you to write up the bed letter after the patient has gone out. Find out why the patient is being treated as he is, and particularly observe any effects attributable to such treatment. When he is taking a potent drug, keep ever before you the early signs of overdose.

Whatever the physician says about the case insert in the report, even if he makes no definite diagnosis, but the views of others need not be recorded. If, however, a surgeon or specialist be called to see the case, his views also should go in the report.

For all this try to form an opinion of your own, letting your view rest on the facts and not falling into the pernicious error often committed by the otherwise brilliant of twisting facts to meet a pre-conceived view. If the case should come to post-mortem, on no account miss it.

In conclusion, don't let your desire for knowledge weigh for a moment with the best interests of the patient. A man may ooze science at every pore yet never be worthy of the name of doctor. Be very gentle, patient and considerate. Discuss *him* as little as possible in his hearing, remembering that though he is probably ignorant of the terms you employ, he will be very apt to misinterpret your remarks and to be apprehensive to a degree.

H. F. B. W.

From the Gazette's Special Pathologist.

G. M. J., ALTON.—Tubercle bacilli are present in moderate numbers, occurring, for the most part, in brightly-stained clumps.

G. M. J., ALTON.—This is a blood-stained watery fluid, the principal microscopic constituents of which are abundant squamous cells and putrefactive bacteria. It contains no muco-pus and tubercle bacilli have not been found in it.

The specimen appears to be the blood-stained saliva which sometimes collects in the mouth when the gums are unhealthy. As for example, from the presence of decayed teeth. (Specimen received September 20th.)

E. R. M., HASTINGS.—There is a moderate number of tubercle bacilli present in this specimen.

PATHOLOGIST.

Tuberculosis of the Genital Tract.

CLINICAL LECTURE
BY Mr. G. BELLINGHAM SMITH.
June, 1906.

Gentlemen,—I have chosen for my lecture to-day the subject of Tuberculosis of the Genital Tract. The diagnosis of this disease is generally difficult, often impossible. That it should be effected early, where possible, is a matter of importance, for it presents a grave prognosis. When primary in the tubes it shows a tendency to progress and involve the peritoneal cavity and adjoining organs, and if left for any length of time to lead to such dense adhesions as to render the removal of the appendages an impossibility. It is important, therefore, to consider carefully any points that may enable us to detect this condition at an early stage.

I will start with the Fallopian tubes, as it is in this part of the genital tract that tuberculosis most often is found, and I will read a few notes of a case that illustrates some of the features on which we may rely for a diagnosis.

A young unmarried woman, æt. 22, complained of pain in the left side of the abdomen. She had had three attacks of inflammation during the past five years, the last one being six months ago. Pain was nearly always present, and was aggravated during the periods. At the age of 16 she had an attack of pleurisy. She has been getting thinner for the past five years, and has had a yellow vaginal discharge for the last year or two, so profuse at times as to require diapers. There is a strong family history of tubercle, several brothers and sisters having died of consumption. On examination there was found to be thickening and matting of the appendages on both sides. On these points a diagnosis of tuberculous salpingitis was made, this being confirmed subsequently by operation.

So far as *physical signs* are concerned, I may say at once that matting of the tubes due to tubercle is indistinguishable from that due to other causes. It has been suggested that nodulation of the tubes close to their uterine attachment is characteristic. But the same condition has been met with in other forms of salpingitis. It is unlikely, moreover, that one's attention would be drawn to tuberculous disease of the tubes at such an early stage, apart, perhaps, from cases, in which it is secondary to disease of the uterus.

I have here a specimen from the Museum without any history, and doubtless discovered at the autopsy. It shows a small tuberculous nodule in the isthmus on each side, filled with caseous material. The presence of ascites or other masses felt in the peritoneal cavity would suggest that the pelvic trouble itself was tuberculous, but under these circumstances the latter would probably be masked by the more obvious signs of tuberculous peritonitis. The presence of phthisis again would be suggestive. In the case we are considering no assistance was derived from the physical examination.

Clinical history.—We have consequently to fall back on the clinical history, and the first thing we note is the strong *family history* of consumption, the patient having lost several brothers and sisters on this account. So far as her own history is concerned, we have no positive evidence that she has suffered from tuberculous disease elsewhere, though she says she had pleurisy about the time of the onset of her abdominal trouble.

Further, we note that she is young, is unmarried, and has been suffering from her present trouble for some years. These are important points, for they enable us to exclude those septic troubles following on miscarriage and labour that so frequently give rise to tubal disease. We have no evidence that she has had gonorrhœa, and the age (16) at which the trouble started renders this unlikely. In the virgin we may get a catarrhal salpingitis, which generally clears up soon. The condition was evidently not of this nature. It was of long duration, with recurrent acute attacks, and there is no doubt that under these circumstances tubercle, as a cause, would be most carefully considered, and its diagnosis regarded as not improbable.

So far as *age* is concerned, tuberculosis of the genital organs is more common from 20 to 40, though cases have been met with at the extremes of life—ten weeks and 83 years of age.

In the present case we have no record of the *temperature* before operation, but this is a point that should be attended to, as in cases of tuberculous salpingitis a daily rise has been noted after the subsidence of acute symptoms, an unusual feature in salpingitis due to other causes. The temperature may be due, in part at all events, to tuberculous disease elsewhere, and we should not overlook the possibility of phthisis.

There is a good deal of variation in the statements of different authors with regard to *pain*. According to some it is almost absent throughout the case, whilst others say that it is very severe. As a matter of fact, cases themselves

vary very greatly; in some cases I have seen there was scarcely any pain complained of, whilst in others it was severe throughout. I am inclined to think that pain is most marked in those cases where matting of tubes by adhesions has taken place; whilst in those where the changes are confined mainly to a distension of tubes with very slight formation of adhesions, pain is slight or absent. In the present case pain was constantly present, and was aggravated at the periods.

The patient has had a profuse yellow *discharge* for a year or two. This has been mentioned as a sign worthy of note, and as being due to extension of the disease to the uterus. I do not know that this is necessarily the case. It does not appear possible, however, from the appearance of the discharge itself, to draw any conclusions as to the presence of tubercle.

Lastly, with regard to *menstruation*, the condition present in this case was much the same as in other cases of salpingitis. It was frequent and irregular, though not profuse. It seems to vary a good deal in different cases as regards quantity, in some being scanty, in others profuse, whilst in a few there has been amenorrhœa. To resume for one moment the points on which a diagnosis was made. We have a well-marked family history of consumption, a persistent inflammation in the pelvis of some years' duration in a young unmarried woman, the ordinary septic causes of such a condition being capable of exclusion, and perhaps, as bearing on the case, a profuse vaginal discharge.

A similar series of symptoms in a *married woman* would present much graver difficulties in reaching a diagnosis, and apart from such information as would be afforded by the temperature, the presence of ascites and tuberculous deposits in the peritoneal cavity, or the signs of disease in other organs, such diagnosis might be impossible; and, as has happened so often, the real condition has been discovered only at the time of operation.

Pathological changes.—Most commonly when operating we find appearances such as are shown in these specimens from the Museum. A common condition is to find the affected tubes enlarged, more or less distended, filled with a caseous material and bound down by adhesions. In other cases, as in tuberculous disease elsewhere, the tendency is rather to the formation of dense fibrous tissue, which gives rise to very great difficulty in the removal of the affected part, or even may prevent it altogether. Or an abscess may form and track for a distance from the site of origin. I had one case under my care recently in Patience ward where pus, starting in the left appendages, had crossed the top of the vagina and made its way down to the right exhio-rectal fossa. It had in its course perforated the pelvic fascia.

One feature worth noticing is this. You will see that in a large proportion of the specimens the fimbriæ are not drawn in, thus distinguishing the tuberculous from other forms of salpingitis. This is a very characteristic feature. When the tube is much distended, you will note, further, that instead of assuming the retort-shape characteristic ordinarily of hydro- or pyo-salpinx, the enlargement is more uniform throughout its length, so that it resembles rather a sausage in shape. The walls are thinner than is usual in cases of pyo-salpinx, and the contents are often a thick caseous material.

Acute attack.—Although tuberculosis of the Fallopian tubes generally runs a chronic or subacute course, it may give rise to very acute symptoms. I have here a thickened Fallopian tube, showing microscopically tuberculous infiltration of the mucous membrane, that was removed by Dr. Parkin, of Hull, and presented to the Museum. The case has been already recorded by Mr. Targett in the *British Medical Journal* (1903, vol. 2, p. 959). The patient, who was aged 22, was taken suddenly ill with severe abdominal pain. She had a rigor, and there was sickness, pyrexia, and all the signs of acute peritonitis in the right iliac and hypogastric regions. The symptoms pointing to acute appendicitis, laparotomy was performed. The appendix was found to be healthy, but the right Fallopian tube was much swollen, and there was acute injection of the surrounding peritoneum. It was removed, and the patient made a good recovery.

Great dilatation of tubes.—The tuberculous tubes may undergo dilatation to such an extent as to be mistaken for an ovarian cyst. This is a variety that is of some interest clinically, and I will give you the notes of a case in illustration.

A young unmarried girl of 20 was sent to me by Dr. Adeney, of Tunbridge Wells, with a rounded tumour the size of a large orange, rising out of the pelvis towards the left. It was smooth, elastic, and free from tenderness, and I had no doubt at the time that it was a small ovarian cyst. She was a healthy-looking girl, with no history of tuberculous trouble. About five weeks before admission she had been seized with dull aching pain in the left side of the abdomen, and it was then that the tumour was first noticed. There had been no pain previous to this attack, nor was any felt subsequently,

although the tumour had been noticed to be growing larger. I removed the tumour, and it was found to be a globular dilatation of the left tube. Further examination showed the right tube to be much enlarged, greatly elongated, resembling a sausage in shape, with a constriction about its centre. Both tubes were free from adhesions.

In this case we may note the almost entire absence of anything pointing to inflammation. There had been one attack of pain of short duration, which led to the discovery of the tumour. There had been no alteration in menstruation, which was regular, and lasted three days without pain. I have already stated that pain seems associated largely with the formation of adhesions, and with their absence in this case we have freedom from pain. Such cases as these are commonly diagnosed as ovarian cysts, and even after removal their tuberculous nature is not always recognised.

Here we have a specimen of a similar condition. The two tubes, which communicated one with the other, were so dilated as to form a tumour reaching three inches above the umbilicus, and to hold three pints of a thin purulent fluid. It was placed in the Museum by Mr. Targett.

In this case there was a history of an inflammatory attack, the patient, who was aged 29, and was married, though sterile, having been laid up five years previous to the operation with a severe illness attended with much abdominal pain. The tumour had been noted for two and a-half years, and was regarded as an inflamed ovarian cyst.

Tuberculosis of the tubes is often secondary to tubercle elsewhere. But a number of cases are met with in which it is apparently primary, no evidence of disease being met with in other organs. I think it most probable that a routine microscopical examination of tubes removed for inflammation would show it to be much more frequent as a primary affection than it is thought to be at present. Not only is it associated with phthisis and tubercle in remote parts, but the disease may spread directly from the peritoneum, or from bowel, the seat of tuberculous ulceration, and retro-peritoneal glands.

Tuberculosis of the uterus.—We have numerous specimens of tuberculosis of the uterus in the Museum. It is usually secondary to tuberculous disease in the tubes, but may on rare occasions be primary. We may find it starting in the body, or in the cervix.

In the *body* it has its starting point in the endometrium, and the specimens we have here show two varieties :—

(1) In one there is a thickened rugose condition of the endometrium, without caseation or ulceration.

(2) In the second, a more characteristic form is shown, in which the tuberculous products have caseated, the interior of the uterus being lined with a granular, friable material.

When affecting the body it is said to extend rarely to the cervix, a statement that is not borne out by these specimens. Obstruction at the internal os leads sometimes to the formation of a pyometra.

The chief interest of tuberculous disease of the uterus is that it gives rise to symptoms that may be mistaken for those of malignant disease. Here, for instance, is a case in which the question of malignancy arose. A patient of 34, who had had five children, was admitted under Dr. Galabin for almost continuous loss of blood from the vagina for six months. There had been free intervals of one or two days only at a time. To begin with, many large clots were passed; latterly the loss had been paler. Patient was anæmic, but there was no pain, no loss of flesh, or offensive discharge. Under an anæsthetic, a sound passed three and a half inches, and the walls of the uterine cavity felt rough. She was curetted, and a quantity of material which looked like growth was scraped away. The fragments were examined by me microscopically and showed typical tuberculous structure. There was found to be some thickening in the pelvis on each side, and the uterus and tubes were removed by the abdominal route. The tubes, though matted, showed nothing like tubercle to the naked eye.

The difficulty of *diagnosing* tuberculosis when confined to the body of the uterus is extreme. The symptoms that have been noted, viz., profuse leucorrhœa, hypertrophy of the uterus and irregularities of menstruation, are not in themselves sufficient to lead to a diagnosis of tubercle If persistent, they would undoubtedly suggest examination and curetting for diagnostic purposes.

The disease, starting in the *cervix*, may undoubtedly simulate carcinoma closely. Dr. Lewers has described a very instructive case in which this condition was regarded as carcinoma even after removal, and it was only on a microscopical examination being carried out later that its real nature was revealed. The description is almost exactly that of a carcinoma.

The cervix was more patulous than usual, and a soft friable growth was felt within the cervical canal, bleeding readily on touching. We must not, in carcinoma, lay too much stress on the other classical signs—wasting, pain, and offensive discharge—for in an early case all these will be absent. At other times tuberculosis of the cervix has presented appearances that are more typical of this disease, or at all events less like carcinoma.

In one case reported by Dr. Brook there was a circular ulcer the size of a sixpence on the anterior lip of the cervix extending into the external os. The surface was pitted and granular, and the edge sharply defined. The surface of the ulcer was not friable, nor was the uterus enlarged. It was thought to resemble a patch of lupus vulgaris, and on examination was found to be tuberculous.

One other type I will mention was shown by Dr. Croft at the Obstetrical Society in 1902. The tuberculous affection of the cervix presented a papillary structure, the projections varying from fine granulations to polypoid masses as large as currants. The growth was softer than in cancer, and did not break away in the same crumbling manner. In both the cases diagnosis was established before operation was decided upon.

In the cervix, then, we shall have to be on the look-out for tuberculous lesions under two main forms, the one in the form of an ulcer, the other as prominent granulations.

The *vagina*, when affected, is almost always secondary to disease above. This specimen shows what we should usually find; numerous small punctate ulcers, some of which have coalesced to form larger areas. The condition is quite typical of tuberculosis.

In the *vulva*, in spite of the term lupus, which has unfortunately been given to a variety of pathological processes, tuberculous lesions, as established microscopically, are rare. Descriptions of them would show that the lesion was fairly typical of tuberculous ulceration as seen elsewhere, and in many instances it was associated with phthisis.

Appointments.

Civil.

CANN, F. J. H., M.B. Lond., has been appointed Certifying Surgeon under the Factory and Workshop Act for the Dawlish District of the County of Devon.

PALMER, H. T., M.R.C.S. Eng., L.R.C.P. Lond., has been appointed to the West African Medical Staff and posted to the Gold Coast for duty.

Looking Back.

'Tis the place and all around it, as of old the cabs drive up;
As of old the take-in dresser asks his pals to come and sup.
—*Guyoscope*, '97.

THE same, yet not the same; of the many memories we carry away with us from Guy's, the one that perhaps ever looms the largest in our minds is the old Colonnade.

Gone are many of its familiar figures, so many of whom we learnt to think of with respect and regard, and yet the building has perhaps altered as little as any part of Guy's during these later years; the erection of the South African War Memorial, the new staircase by Cornelius, and the substitution of the present flooring for the old flagged pavement being the chief alterations of the last decade. Near by, the old Library has been moved to its present more spacious quarters across the park, while the offshoot from the women's Surgery mars the symmetry of the opposite quadrangle.

In our first and second years, when walking through the Colonnade, we seemed to feel that we trod on hallowed ground, and, if only for a few moments, became a part of that world which seethed around us. When, after varying lengths of time, we at last joined the happy throng of ward clerks, we spent many hours there waiting for our respective chiefs or proudly discussing our cases and their progress.

Later, when we became dressers, we were apt to forsake the Colonnade for the more comfortable repose of the old dressers' room, now, alas! no more. Still, in the lazy noontide we were wont to smoke our pipe of peace upon its steps and in the gathering twilight watch the nurses wend their weary way to chapel.

These last two pastimes still seem to flourish as of yore, but what of the old familiar figures? "Pom" (absorbed in thought), with his slow and steady step. "Clemmy," with his firm gathered around discussing the latest accident admissions and recalling similar cases in bygone years. "Washy," with his ever-genial manner. "Piggy," intent on all the sporting side of hospital life, and "Rosie," with his bundle of reports under his arm.

And then, looking back further still into the slowly gathering mists of time, there appear those well-known figures, Sir Henry Howse, Mr. Davies-Colley, Dr. Pye-Smith, Dr. Goodhart, Dr. Galabin, and Dr. Savage.

Here are a few of those whom Guy's will know no more; most of them have reached their

allotted span of sixty years, while some have joined the great majority, but their memories we long shall cherish in the happy recollection of the time when we were students.

For those here now, and for those who are to come, the future doubtless holds an equally happy prospect, and long may they live to revere their Alma Mater.

Let it fall on Colonnade with sun and shine or rain and
For the newer generation rises slowly, and I go. [snow,

ARCUS SENILIS.

Novelties.

Kendal & Dent.

A reliable watch is almost indispensable to the medical student. Not only in the wards but in the laboratories as well, the need for a good watch provided with a minute hand will be felt—in the laboratories in experimental work in physiology, and in the wards in taking observations, and in numerous other ways which need not be specified. Messrs. Kendal & Dent, 106, Cheapside, Watchmakers to the Admiralty and to the War Office, make a speciality of watches for medical men and nurses, and anyone not already provided with a satisfactory instrument would do well to consider their special lines —particularly since they announce "a special cash discount to the members and staff of the hospital." They stock a special line, "The Chronograph Stop Watch," which is especially suitable for medical men. The watch possesses a large easily-read dial, and is made in open face, half-hunter, and hunter style, silver cased, at prices ranging from £2 upwards. They also make a special line in English lever watches from 42s. upwards. With all these a five or seven years' guarantee is given. A sound serviceable, but much cheaper, line is their Swiss lever watch, made in nickel and oxydised steel casing, and catalogued from 10s. 6d. upwards. These instruments are strongly and well made, are good timekeepers, and may be relied on, being in every way suitable for the purposes for which a medical student usually requires a watch.

Fry's Cocoas.

On more than one occasion we have sampled the excellent productions which Messrs. Fry & Sons, Ltd., of Bristol and London, have put on the market, and on every occasion we have had nothing but praise for them. Fry's has become a household word, and that name on a cocoa tin is sufficient guarantee for the excellence of whatever is inside—so long as the wrapper is unbroken. Lately we have had an opportunity of trying some of their more recent samples. Of these, the Malted cocoa, a comparatively new production, calls for special mention. It is a combination of pure cocoa extract with Allen & Hanbury's Extract of Malt, and is one of the most palatable cocoas we have ever tasted. The combination of pure malt extract with a cocoa so free from fatty matter, and so easily soluble, forms a rich nutritive and restorative food. It possesses the additional advantage of being easily prepared, no boiling being required, and the resultant beverage has a delicious taste in which the flavour of the malt is scarcely perceptible. For children and invalids, it is undoubtedly superior to the majority of cocoas on the market. Its fine flavour, altogether devoid of the harsh, oily taste of cocoas not so completely deprived of their superfluous fats, and its almost perfect solubility, are unsurpassed by any other brand of cocoa we have tasted. This firm produces a variety of pure sweets, the basis of which is chocolate, either of the ordinary kind or milk chocolate. Of the latter, the Milk Chocolate Bon-Bons are particularly praiseworthy. Delicious in taste, and daintily put up, they are at once the purest and neatest-looking examples of that class of sweetmeat. The value of such sweets as stimulating nutriment is considerable; those made by Fry's may be relied upon for their purity and wholesomeness.

Bovril, Ltd.

The Annual Reception at the Model Bovril Factories in Old Street, E.C., which has become quite a feature during the last few years, and for which some 1,300 doctors accepted an invitation to be present last autumn, will be held on the 26th and 27th instant.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Students' Chapel Choir.

DEAR SIR,—I beg leave, through your columns, to call the attention of your readers, and especially of FRESHMEN, to the existence of a *Students'* Chapel Choir.

All men are particularly invited to help in the Sunday 11 a.m. and 7 p.m. services, by their presence. In order that attendance shall not be burdensome to members, each one is only asked to be present at two Services in the month—either two mornings or two evenings, or one morning and one evening; however, if a member feels inclined to attend more frequently, his services are particularly welcome. I might also add that there is no singing test before joining the Choir.

I will close by making *an appeal* that men will, at any rate, attend once as an experiment, and thus sweep aside any feeling of strangeness.—Yours, etc.,

F. HOLCOMBE FULLER, *Hon. Sec.*

Lectures* for Sessions 1906—1907.

WINTER SESSION. OCTOBER—MARCH.

†	LECTURERS.		DAYS.					
Anatomy (1st & 2nd)	Sir Alfred Fripp and Mr. Steward	9	—	Tu	W	Th	—	—
Microscopical Pathology (3rd)	Mr. G. B. Smith and Dr. Eyre	9	—	Tu	—	—	Fri	—
Pathological Classes (3rd & 4th)	Dr. Fawcett and Mr. Rowlands	9.15	—	—	W	Th	—	Sat
Bacteriology (Jan. to Mar.) (4th)	Dr. Eyre	4	—	Tu	—	Th	—	—
Practical Obstetrics (3rd & 4th)	Mr. Hicks (Oct. and Jan.)	12	—	Tu	—	—	—	—
Chemical Physiology (Jan.) (2nd)	Dr. Pembrey, Dr. Hertz & Mr. Cameron	11	—	—	—	—	Fri	Sat
Chemistry (1st and pre. sci.)	Dr. Wade	12.15	—	Tu	—	Th	—	—
Practical Chemistry	Dr. Wade, Mr. Ball and Mr. Merriman	10-12	—	Tu	—	Th	—	—
Advanced Practical Physiology (3rd)	Dr. Pembrey	11	M	—	W	—	—	—
Practical Medicine (3rd)	Dr. Bell Walker and Dr. Mann	12	—	—	—	Th	—	—
Experimental Physics (pre. sci.)	Dr. Fison and Mr. Merriman	12	M	—	—	—	Fri (2)	—
Chemical Physics (1st)	Dr. Fison	2	M	—	W	—	Fri	—
Practical Surgery (3rd)	Mr. Greeves	12.30	—	Tu	—	Th	—	—
Physiology (2nd)	Dr. Pembrey (Oct.-Dec.)	10	M	—	W	—	—	Sat
Clinical Medicine (3rd & 4th)	The Physicians	4	—	—	—	Th	—	—
Surgery (3rd)	Mr. Symonds, Mr. Lane and Mr. Dunn	9.30	M	—	W	—	—	—
Clinical Surgery (3rd & 4th)	The Surgeons	1.30	—	—	W	—	—	—
Elementary Biology (1st)	Dr. Stevens and Mr. Thompson	10.30	—	—	W	—	Fri	—
Morbid Anatomy (3rd & 4th)	Dr. Fawcett and Dr. French	2	M	Tu	W	Th	Fri	Sat (12)
Medicine (3rd)	Dr. Taylor and Dr. Hale White	4	—	—	W (3)	—	Fri	—
Ophthalmic Surgery (Jan.) (4th)	Mr. Eason	4	—	—	W	—	—	—
Public Health (Jan.) (4th)	Dr. Sykes	4	M	—	—	—	Fri	—
Anæsthetics	Mr. Rowell (Dec.)	—						
Dental Surgery and Pathology	Mr. Wynne Rouw	4	—	—	—	Th	—	—
Metallurgy	Dr. Wade	4	M	—	—	—	—	—
Practical Dental Metallurgy	Mr. Hopson (Jan.)	2.30	—	Tu	—	—	—	—
Dental Anatomy & Physiology	Mr. Maggs	4.30	—	—	W	—	—	—
Dental Mechanics	Mr. Lewin Payne (Oct.–Dec.)	4	—	Tu	—	—	—	—
Practical Dental Mechanics	Mr. Pillin (Jan.)	2.30	—	—	—	—	Fri	—

SUMMER SESSION. MAY—JULY.

†	LECTURERS.		DAYS.					
Medical Jurisprudence (3rd & 4th)	Sir Thos. Stevenson	10	—	—	W	—	Fri	—
Midwifery (3rd)	Dr. Horrocks and Mr. Targett	9	—	Tu	W	Th	—	—
Diseases of Women	Dr. Horrocks and Mr. Targett	9	—	—	—	—	Fri	—
Pathology (3rd)	Dr. Pitt and Dr. Bainbridge	9	—	—	—	—	—	Sat
Mental Diseases (3rd)	Dr. Craig	9.30	M	—	—	—	—	—
Bacteriology (May & June) (4th)	Dr. Eyre	4	—	Tu	—	—	Fri	—
Practical Obstetrics (3rd)	Mr. Hicks	12	—	Tu	—	—	—	—
Biology and Botany (pre. sci.)	Dr. Stevens	2	—	—	W	—	Fri	—
Physiology (2nd)	Dr. Pembrey	9.30	M	—	—	—	Fri	Sat
Histology (1st)	Dr. Pembrey, Dr. Hertz & Mr. Cameron	10.30	M	—	—	—	Fri	Sat
Practical Surgery (3rd)	Mr. Greeves	12.30	—	Tu	—	Th	—	—
Practical Medicine (3rd)	Dr. Bell Walker and Dr. Mann	12	—	—	—	Th	—	—
Experimental Physics (pre. sci.)	Dr. Fison and Mr. Merriman	12	M	—	—	—	Fri (2)	—
Clinical Medicine (3rd & 4th)	The Assistant Physicians	1.30	—	—	W	—	—	—
Clinical Surgery (3rd & 4th)	The Assistant Surgeons	1.15	—	—	—	—	Fri	—
Morbid Anatomy (3rd & 4th)	Dr. Fawcett and Dr. French	2	M	Tu	W	Th	Fri	Sat (12)
Materia Medica (2nd)	Dr. Beddard	4	M	Tu	—	—	Fri	—
Anæsthetics	Mr. Rowell (June)	—						
Operative Dental Surgery	Mr. Parfitt	2	—	Tu	—	—	—	—
Chemistry	Dr. Wade	9.30	—	Tu	—	Th	—	—
Practical Chemistry	Dr. Wade, Mr. Ball and Mr. Merriman	10.30	—	Tu	—	Th	—	—

* No effort has been made to include the many demonstrations or practical work.

† The numbers in this column refer to the years in which this course should be attended.

The Sciences.

Anatomy and the Dissecting Room.

How to begin Work.

THE first working day spent at Guy's Hospital is always a memorable event. There is a feeling of strangeness, which is quite natural. We are but vague y conscious of what is to be done, and blissfully ignorant how to set about it. The very names of the subjects we have been told to learn convey no meaning, and the school buildings, with their various class-rooms and theatres, are an unexplored country through which we travel as in a maze.

For the help of the new men, it is proposed to give such instructions as they may need in beginning the work of their first winter session at Guy's. It will be assumed that they have already decided what the general course of their study is to be; that is briefly, whether they are going in for the Preliminary Scientific Examination of the London University or not. Information on these matters is readily obtained at the Medical School Office, and any student who is not clear in his mind as to the examination he has to prepare for, should read carefully page 77 in "the green book."

After the first few days men soon become familiar with the work, and learn from one another. But at first they have made no acquaintances, and all around them are strangers alike.

Under the Five Years' Regulations of the Conjoint Board, the first object of the student (entering, for instance, in October, 1905) is to pass the examinations in Chemistry and Biology, as failure to complete these by the following March (*i.e.*, 1906) must postpone the date at which the Second Conjoint should be passed (*i.e.*, April, 1907), *vide* par. 6, p. 377, so that students are advised, unless they have passed either one or both of the above subjects before entering the hospital, or are unusually well versed in the subjects for these examinations, to postpone dissecting until one or both (Chemistry and Biology) have been completed.

What follows refers, therefore, only to those who intend to undertake their dissections at once.

Monday, October 1st.—There is no actual work done on this day, but each student who is ready to dissect (*vide supra*) should pay his fee, *vide* par. 2, p. 377, for anatomical material in the Medical School Office, and then interview the Senior Demonstrator in the dissecting-room and see that his name is put down for a "part." He should then study the Red Book—which contains the rules of the dissecting-room—and purchase the necessary instruments and the other paraphernalia therein indicated. Any spare time is well spent in learning where the museums, class-rooms, and theatres are situated. The ground plan at the front of the "green book" will show them at a glance, and serve as a very efficient guide.

Tuesday, October 2nd.—At 9 o'clock in the morning the start is made, and we get our first introduction to the duties of hospital life at a lecture by Mr. Dunn in the anatomical theatre, and at 12 o'clock a demonstration is given to all first year's men by the Senior Demonstrator (Mr. Turner) in the small theatre attached to the dissecting-room, when the way to work in the dissecting-room is fully explained.

To find a "Part."

Look down the list of names on white cards which are suspended upon the wall of the dissecting-room opposite each subject or body. Be careful to take the proper side (right or left) which is allotted to you. If you fail to find your name on these cards, make yourself known and report the fact to one of the demonstrators present, who may be recognised by his white coat. The next thing is to obtain a bandage and cloth from the attendant (Hancock), who will be found in a room outside the dissecting-room. With these the "part" must be covered up at once to prevent the skin from drying. If the "part" is a limb, bandage it firmly from the hand or foot upwards as far as the bandage will go, and cover the remainder with a cloth, *but be careful to leave the metal ticket exposed to view.*

The Requisites for Dissection.

The following articles are essential, and must be purchased at once:—

a. Case of instruments. This should contain at least four knives, forceps, scissors, hooks, needle and blowpipe, and can be obtained from Hancock, the dissecting-room attendant, or at Messrs. Down Bros., of St. Thomas's Street; Messrs. Arnold & Sons, West Smithfield; Messrs. Maw, Son & Sons, Aldersgate Street; or Messrs. Allen & Hanbury, Plough Court, Lombard Street. Price about 15s. to 20s.

b. Books. These are obtainable at Grattan's in the Borough, next door to the post office. It is advisable to obtain *Cunningham's Practical Anatomy* (2 vols. 10s. 6d. each) for use in the dissecting-room, which show how to proceed and what is met with in the course of dissection; *and* one at least of the standard text-books, viz., Gray, Cunningham, Morris, or Quain's Text Book. The inquirer will hear their merits compared at the introductory lecture and demonstration; if still in doubt he should consult personally one of the demonstrators, and ake with him any old text-book he may possess for inspection and advice as to its use.

c. An apron and sleeves for the sake of protection and cleanliness. These are sold by Hancock. Any old coat may be worn under them. Instruments, books, apron and coat must be safely put away in a locker provided for the purpose; the key is obtained by making a deposit of 5s. at the Medical School Office. During the day hats and coats are kept at a special cloak-room under the Wills Library.

d. A disarticulated skull and a half skeleton. *(See below.)*

With regard to all the necessary articles mentioned above in a, b *and* d, *it is well to point out to new students*

that many men who have just completed their anatomical studies may wish to dispose of some of the above articles second-hand, and new students may obtain information about, and details of such things, to be bought from the Librarian or Hancock, with whom such things are usually lodged. Before completing any such purchase it is always best to make sure that the books are of the last edition published and that the instruments are reliable, points on which any of the demonstrators will gladly give advice.

HOW TO DISSECT.

The instructions given on this point in the text-books are by no means clear to one who has never done any dissecting in his life, and who does not know the meaning of half the scientific words in which the directions are given. He finds quite a new language in use, and no translation of it in the margin. Thus, he is told to "make an incision," instead of "cut"; to "reflect the integument," for "turn back the skin"; "anterior and posterior," instead of "in front and behind." Not a little of the difficulty and dulness attaching to anatomical description depends on the need of a mental translation of the language in which they are written.

To deal fully with the skilful act of dissection is unnecessary here, and we will merely give such short directions as are needful for the work of the first two or three days. The objects of dissection are—firstly, to educate the sense of touch, and to teach the hand and the eye to work together in delicate manipulation; and secondly, to enable the student to see and handle the different structures that he reads about in his books. The following advice may be given:—

1. Take your book (Cunningham) by which you intend to dissect and read over the pages giving directions for the skin incisions to be made in that particular part you are about to dissect.

2. Cut through the skin along the lines given in the books.

3. Turn back *the skin only*, leaving the fat upon the body. This is done by holding the knife obliquely with its edge towards the skin.

4. Take away the fat carefully without damaging the dense white layer which covers the muscles.

5. Clean the surface of the muscle. To do this make the muscle taut by moving the limb, or pulling on it with hooks; then with the point of the knife clear away everything covering the muscle by working *with* its grain or fibre, *not* across the fibres.

6. Before taking any fresh step in your own dissection get a notion of the arrangement of the parts you are going to expose, either from another man's part, or from the "pickle-room," or wax model museum preparations. *Most important of all, never remove any structure until you have obtained a good mental picture of it, and have also read in your book the description of it, and have satisfied yourself you know it.*

7. Work very slowly at first. To turn back the skin carefully is quite enough to occupy the first day's work-time.

8. Cover the "part" up with a cloth before leaving it for the night.

The student should, on the first day, ask one of the Demonstrators for a copy of the Red Book, which contains the rules of the dissecting-room, and also much useful information as to classes which must be attended, and particulars of the School examinations.

The first year's man will find that he has first of all to dissect an arm or a leg. Having found his part, he should next examine the notice board, where he will find particulars of the bone classes which are held twice a week by Mr. Mollison and Mr. Thompson. He must attend the classes on the part he is dissecting, and at these he will find the anatomy of the bones and muscles he is dissecting fully explained.

OSTEOLOGY.

A thorough knowledge of the bones is the basis of anatomy, and hence the subject cannot be too carefully studied. The student will find that to know his bones well is of importance, not only in the School Elementary Anatomy Examination, but also for the Second Conjoint, Intermediate M.B., Primary F.R.C.S., and even for the Final Examination in Surgery.

Like other branches of anatomy it must be learned practically—by handling the bone, reading the description of it, and noting the various marks upon it, each one of which has its meaning. In order that the bones may be studied at home as well as at the hospital, it is very important that each student should possess them. Half sets of osteology, that is, the bones of one side of the body with the spine and head, can be obtained second-hand at a very moderate outlay, and if carefully used they will at the end of the course readily fetch half the original cost, or even more. Some very useful half-sets (second hand) are to be seen at Messrs. Millikin & Lawley's, 165, Strand, W.C., price 30s. If these are disposed of at the end of the second Conjoint examination for half the price, it follows that the immense advantage of having the bones always at hand while preparing for the examinations is obtainable at the expense of a few shillings.

In selecting a half-set of osteology it is as well to have the guidance of a fellow student who is familiar with them. See that the half-set is complete, and that each bone is of the *same* side. Avoid "the nice white bones," which dealers always charge extra for, and choose the rougher, better marked and dirtier ones. The preparation which makes them white does away with many of the marks and ridges which have to be studied. With regard to the disarticulated skulls, try the separate bones and see whether they fit into each other properly, as it is not uncommon to find skulls offered for sale, the bones of which have come from different subjects, and hence cannot be articulated.

It may be necessary to caution men against neglecting the subject during their first year: they will find the second year's work quite heavy enough as it is, and moreover may suffer the mortification of being spun in the school elementary anatomy examination at the end of

the first winter session, if they neglect the bones in their first month's work.

DENTAL STUDENTS.

A dental student, on entry, must pay the fee (10s. 6d.) for material at the Medical School Office, on October 2nd, between 10 a.m. and 1 p.m., so that a part may be allotted to him at the earliest opportunity. He should obtain a copy of the rules of the dissecting-room, and study those paragraphs which specially concern him. He should be careful not to miss the demonstration given by Mr. Turner to first year's students, on Monday, October 1st, at 12 noon.

It is very important for first year's dental students to commence their anatomical studies without delay. During their first six months they should dissect the upper and lower extremities, and attend the bone classes held by Mr. Mollison and Mr. Thompson throughout the winter and summer sessions. They should pass the elementary anatomy examination at the end of their first six months if possible, or failing this, not later than nine months from their entry at the hospital. The subjects of this examination are:—

1. All the bones and ligaments.
2. The muscles and fasciæ of the upper and lower extremities.

Having passed the elementary anatomy examination, dental students are allotted a head and neck, in which they are expected to dissect, besides the muscles and ligaments, the vessels, nerves, and other soft parts, and also to acquaint themselves with the anatomy of all the special regions of this part, *e.g.*, the orbit, mouth, pharynx, etc.

Mr. Mollison holds special classes for these students, throughout the winter session, in the dissecting-room theatre, once a week, and a test examination is held on the work at the completion of the dissection and the course of demonstrations. It will be agreed that the second dissection is even more important than the first, and it is well to realise that, as the work done by each man is noted and marked every week by Mr. Mollison, and men are only signed up for the necessary session's work when these marks are satisfactory, that careful and conscientious dissection, punctual attendance at demonstrations, and industrious reading up of all the work, must be begun as soon as the dental student enters the dissecting-room, and continued until the subject is mastered.

It is very essential that the study of anatomy, physiology, and surgery should be prosecuted energetically from the outset, thus obviating the necessity for "cramming" these subjects when preparing for the Final L.D.S. examination. Careful and patient dissection is the easiest way to learn Anatomy. An attempt to "cram" it from books is certain to result in disaster.

PHYSIOLOGY.

Physiology, which treats of the working of the healthy body, and forms, therefore, the institutes of medicine and the necessary foundation of any rational mode of treatment of the body in disease, differs from its sister subject, Anatomy, in that it requires much greater intellectual efforts for its acquisition, and a more thorough preliminary training for the comprehension of its doctrines. Physiology consists chiefly in the application of the natural laws elicited by the researches of physicists, chemists and biologists to the explanation and description of the phenomena occurring in the living body, so that an acquaintance with the chief laws of physics, chemistry and biology forms the necessary basis for the study of physiology. The study of the nervous system, moreover, requires some knowledge of psychology. The difficulty and importance of the subject would seem to indicate, in the clearest possible manner, the necessity of pursuing its study throughout the short space of two years which are devoted to the subjects that are preliminary to the work in the wards. On this account, the student beginning his medical studies in October must give all his energies to getting up his biology in order to pass in it at the earliest possible opportunity, and he may profitably combine with the biology lectures and classes the reading of some physiology, such as Huxley's *Elementary Lessons in Physiology*, or the smaller works on the same subject by B. Moore and by Foster and Shore. He is advised to attend the physiology lectures at this time, but cannot be "signed up" for them.

By the ordinary student the practical study of the subject included under the heading "Physiology" is begun in the first summer session. During the whole of this session he must attend the classes in Practical Histology. These are held in the students' histological class-room three times a week; each class lasts two hours. Students attending this course must provide themselves with a compound microscope,* certain mounting materials (a list of which can be obtained at the office), and with Schäfer's *Essentials of Histology*, which should be carefully studied in the intervals between the classes. The microscope must have two objectives, a $\frac{2}{3}$-inch and a $\frac{1}{6}$-inch, a nose-piece and an indicator fitted to one of the two eye-pieces. The following makers are recommended: Crouch, Zeiss, Ross, Leitz, Swift. From any of these latter firms a good microscope, with all necessary accessories, can be obtained for about £7; the microscope from inferior makers is worse than useless, for it is essential that the student should buy an instrument which will be of some use to him in future years, when as a practitioner of medicine, he desires to examine tumours, urinary sediments, sputum, etc., for purposes of diagnosis.

At the end of the summer session an examination is held in histology. All students who have attended this class must enter for the examination. Only those who pass the examination will be allowed to attend the tutorial classes in physiology held during the second winter session in preparation for the examinations of the Conjoint Board. Those who fail at this examination will be examined in the following session.

* The demonstrators will be very pleased to advise any student in the purchase of a microscope. It must be distinctly understood that antiquated instruments, such as those sometimes handed down as an heirloom in a family of doctors, are practically useless.

During the first summer session and the first half of the second winter session, the student should attend regularly the lectures on physiology held three times a week, on Mondays, Wednesdays, and Saturdays During the same time those who have passed the histology examination at the end of the previous session should attend the tutorial classes held by one of the demonstrators throughout the session. At the same time he should read up the subjects in some text-book such as Starling's *Elements of Human Physiology*, or Halliburton's *Handbook of Physiology*.

During the winter session, *i.e.*, from January to March, students must attend the classes in practical physiology, which are held on Friday and Saturday mornings from 11 to 1. From October to Christmas physiological chemistry is worked at in the room devoted to that subject. While attending this class, they are recommended to read up the subject in *Practical Physiology* (published by Arnold) which is used in the practical work. From January to March the class is held in the histological Laboratory, where the student becomes practically acquainted with physiological apparatus, and performs simple experiments.

Students who have been diligent in following this course of studies will be ready to enter for the second Conjoint examination at the end of this session. Shortly before this examination, a test examination is held by the demonstrators in order to judge of the fitness of the candidates. Those who fail to pass the second Conjoint at this time must attend the revision classes held by the demonstrators during the two or three months preceding the July and January examinations of the Conjoint Board.

Certain modifications in this course of studies is necessary for those who are going up for the M.B. of London or other Universities. Having passed their preliminary scientific before entering, they are free from the study of biology during their first winter session. They should therefore attend the physiological lectures during this session, at the same time studying the subject in Starling's *Physiology*. In their first summer they attend the histology classes, and read Schäfer's *Essentials of Histology*. During their second winter, they should attend the class in advanced practical physiology, which is held twice a week, each lesson occupying between two and three hours. During this session they are recommended to read up the subject in Stewart's *Manual of Physiology* and using *Practical Physiology* in the advanced practical work. This class should also be attended by candidates for the first F.R.C.S. examination, although in their case attendance may often be profitably postponed until the third winter session. The reading for this examination is similar to that required for the Intermediate M.B. of London.

Those who are desirous of obtaining distinction at the Intermediate M.B. should supplement the course of reading already indicated with original papers in the *Journal of Physiology* and with parts of Schäfer's *Text-book of Physiology* and *Recent Advances in Physiology and Biochemistry*, edited by L. Hill. Such students will also find parts of Foster's *Physiology* extremely useful and suggestive. University students should also attend the lectures given on Physiology at the London University.

Revision classes are held by the demonstrators during the two months preceding the first F.R.C.S. and first M.B. examinations for the special preparation of candidates for these examinations.

List of books recommended:—

FOR COLLEGE MEN.—Schäfer's Essentials of Histology; Starling's Elements of Human Physiology, or Halliburton's Handbook of Physiology; Practical Physiology, published by Arnold.

FOR UNIVERSITY MEN.—Stewart's Manual of Human Physiology; Embryological parts of Quain's Anatomy.

BIOLOGY.

The course of instruction for the Preliminary Scientific of the London University M.B. examination consists of lectures which are given on Wednesday and Friday at 10.30 a.m., and on Thursday at 2 p.m., and of demonstrations and practical work on Wednesday and Friday mornings 11.30 to 1.30, and on Wednesday afternoons 2 to 4 p.m. The Biological Laboratory is open at all times between 9.30 a.m. and 5 p.m., so that students may revise their work and complete any part they may have been unable to finish in the regular hours. Those students who are preparing for the Biology examination of the Conjoint Board of the Royal College of Surgeons and Royal College of Physicians will attend certain of the above-mentioned lectures, commencing on Wednesday, October 3rd, at 10.30 a.m. The practical class is held immediately after lecture in the Biological Laboratory. The requisite instruments, books, etc., for this course should not be purchased until after consultation with the lecturer, who will advise as to these in the first lecture. T.G.S.

CHEMISTRY AND PHYSICS.

The student may be tempted to regard Chemistry and Physics too much as preliminary work, and therefore of no real importance to him, provided he passes his examinations within reasonable time. If he adopts this attitude, he is making a grave mistake, for several reasons. An understanding of the principles of Chemistry and Physics, more particularly of Physical Chemistry and Organic Chemistry, is of great importance in the latter work, not only in Physiology, but also to a certain and increasing extent in the wards. Moreover, methods of study are very much the same, whatever the subject, and methodical habits of work, acquired over the preliminary subjects, will save much trouble later on. In this connection the compilation of notes, that will be of use when the time of revision comes, is an art not too easily acquired; either the notes are so lengthy that a text-book saves time, or they are incomprehensible and

incomplete. The attitude of the student, who was disappointed at getting a first. as this represented so much waste energy, is not one to be recommended, as it generally leads to a "referred schedule."

For the 1st Conjoint and Dental Preliminary Science examinations only six months' work is required, but the student who enters without the slightest acquaintance with Chemistry or even with Elementary Mathematics, will have his work cut out for him if he is to pass in six months on his merits—happily he is rare. The candidate for the Preliminary Scientific M.B. examination is more fortunate. He has a full year's course before him with no Organic Chemistry, and will find whatever knowledge of mathematics he may have of inestimable value in his Physics. He should, therefore, have no difficulty in passing his examination at the end of the year.

To either student it cannot be too strongly urged that lectures and reading alone are of no value, practical work in the laboratory being all important. For this reason the clinical laboratory is open daily from 10 a.m. till 5 p.m., so that a student can work there, if he wishes, at other times than those officially assigned to practical work.

As to Organic Chemistry, London M.B. students should take this examination one year after passing the Preliminary Scientific. Here, again, practical work is of paramount importance, and the student should work regularly in the laboratory on Monday and Thursday afternoons, in spite of the pressing claims of other studies. In this way the Organic Chemistry examination will be found to interfere less with his other studies than if he left most of the work to be done in the last session before examination.

Chemistry and Physics lectures start from Tuesday, 2nd October, and students should go to the chemical laboratory on that day at 10 a.m., to receive their lockers. Organic Chemistry students should receive their lockers in the laboratory at 2 p.m. on Monday, the 1st.

PRACTICAL PHARMACY, MATERIA MEDICA, DISPENSING.

These subjects are taught in the practical pharmacy class at the Dispensary, by Mr. Finnemore, the Hospital Pharmacist. This course meets the requirements of students preparing for the Conjoint examination in practical pharmacy and the intermediate M.B. Lond. The study of the physical characters, and chemical properties of substances used in medicine, and preparations made from them, and the doses in which they may be given, requires some considerable amount of application and exercise of memory. The instruction given in the class is therefore very practical, and every assistance is given to the student by demonstrations, access to materia medica specimens, and *viva voce* examinations, in acquiring a sound knowledg of materia medica. The art of dispensing, the writing of prescriptions, and the method of prescribing drugs, form also part of the instruction given in the practical pharmacy class. During the year there may be three courses of three months each, should a sufficient number of students require instruction.

PHARMACY, PHARMACOLOGY AND THERAPEUTICS.

Lectures are given during the summer session in the new theatre, by Dr. Beddard. This course is intended to meet the requirements of students preparing for the third Conjoint examination in Pharmacology and Therapeutics, for the intermediate M.B. and final M.B. Lond., and the third M.B. Cambridge.

THE MEDICAL WARDS.

Work in the medical wards is taken in two sections of three months each, with an interval of three months, during which time the post of assistant physician's clerk is held, together with that of assistant surgeon's dresser.

A few words of advice to the oncoming medical ward clerk may not be out of place. In the first place we would urge him most strongly *not* to take his "manual of medicine" and read it through from cover to cover. He should, however, endeavour to become thoroughly acquainted with those diseases which he finds examples of in the beds which have been allotted to him.

Secondly, he must become familiar with the various physical signs indicative of disease in the various organs of the body, comparing his own cases with others which he finds in the wards. Too often the keen and energetic clerk is so busily engaged in noting and learning signs of disease that he neglects to observe and remember appearances and landmarks which may be, or are, compatible with perfect health. We would advise him, therefore, to listen to the "normal" heart as well as to the "failing" heart, to become accustomed to the normal vesicular murmur before he begins to grapple with the mysteries of "bronchial breathing."

Thirdly, we would strongly advise him to make a friend of his particular house-physician, from whom he will obtain many "tips" and "wrinkles" which will prove of immense value to him for all time, smoothing over rough places in the stony ways of medicine, and clearing up abstruse questions which have arisen as a result of his reading.

From his house-physician, also, the medical ward clerk will learn when a "tapping" will take place, when an urgent venesection will be required, or of the necessity for the surgeon's knife. In fact, if he be only willing and energetic, he will find the house-physician a complete "medicine-book" as well as a most kindly friend.

Fourthly, he will meet the medical registrars. We mention this point last, because we wish him to understand that the post of medical ward clerk is one which involves a good deal of responsibility to the holder, and while the registrars are medical tutors, yet they are in no sense schoolmasters. Neither are the ward clerks schoolboys. The man who cuts his work, who shirks his reports, who fails in a position of trust, who neglects to pass that catheter upon No. 14, will be written down

a worthless fellow, a person of no account, and that mark will stand against his name until he leaves the hospital; it will hamper him throughou this subsequent career.

The arrangement for work in the medical wards is as follows:—The registrars are two in number; one is attached to the beds of Dr. Taylor and Dr. Hale White, the other to the beds of Dr. Pitt and Sir Cooper Perry. Each registrar makes a formal round three times in the week. While one registrar is in the wards, the other is giving advice in the clinical laboratory or assisting at the more lengthy examinations in the wards. When the registrar visits any bed, the medical ward clerk responsible for the report of that bed MUST be present with rough notes of the history of the case, and he should, if possible, be able to describe the physical signs of disease. These rough notes should subsequently be neatly copied into the report sheet, in order that the physician may inspect them upon his visit to the wards in the afternoon. After the visit of the physician, the ward clerk should at once enter the remarks made by the physician, and also the diagnosis, if the latter has been made. Only the physician's diagnosis is to be entered in the report.

The registrars begin their morning round at a quarter-past ten; they leave the wards at a quarter-past twelve, in order that dinners may be served. The wards, however, are open to the ward clerks until one o'clock, when they are closed for nursing purposes until half-past one. We mention this point because of late there has been some misunderstanding. The boards which are hung upon the doors of the wards at mid-day, indicate that the wards are closed to visitors.

In compiling his report, the ward clerk should be brief and thorough; he should avoid being "long-winded." He should pay great attention to "family history," which may indicate a predisposition to disease, and he should make a careful summary of the previous illnesses from which the patient has suffered, consulting, if necessary, the records which are kept in the medical registrar's room.

Whenever possible, he should attend the post-mortem examinations which are held daily, and he should *always* be present at the autopsy of any case the record of which he has been keeping. The abstract of such autopsy is subsequently to be obtained from the post-mortem room and copied into the medical report. During his first three months in the medical wards, we strongly advise him to read Dr. Taylor's "Manual of Medicine." This was the advice of the late Dr. Bryant, one of the soundest clinical teachers that Guy's has ever had. Later on, during his second term of office, Osler and Allchin may claim his attention. Other books will be recommended or condemned by the registrars, as the case may be, upon inquiry. And as he reads, and adds to his store of knowledge, so the ward clerk should visit the Museum and inspect the specimens there collected. Only in this way will he gain a thorough insight into the mysteries of medicine, and be able to make the information which he has obtained of service to himself and of practical value to some less fortunate mortals whom he may be called upon to treat in the years to come.

PATHOLOGY.

The large number of courses of instruction in Pathology given in the school leads to some uncertainty in the student's mind as to the order and period of the curriculum in which they should be taken.

Pathology is one of the few good things of which it is impossible to have too much; and probably the best advice that can be given to a student who has passed his second conjoint or intermediate M.B., is to take the instruction in pathology which is offered to him as early and as often as possible. When he goes into practice, a man's clinical knowledge broadens and extends year by year, but his pathology—if he is a busy man—is apt to stand at the point which it reached in his student days. It behoves him, therefore, to make his knowledge thereof as thorough and complete as possible, and to avail himself of all the numerous courses of instruction given in the School. Pathology and clinical work are so closely linked together, that they ought always to be taken up simultaneously; the man who can bring his pathology to bear on his clinical work, and can carry the clinical instinct into his pathology, gains a far deeper insight into both aspects of disease than can be obtained in any other way.

Most of the instruction in pathology is given in the early morning, so that it shall clash as little as possible with work in the wards, and it is rarely advisable to postpone attending a course till the time arrives, which many seem to expect, but fortunately seldom reach, when ward duties shall be less exacting than they are at first. A man who leaves the dissecting-room in April should begin to attend Dr. Pitt and Dr. Bainbridge's systematic lectures on pathology (New Theatre, Saturdays at 9.30), where he will be introduced to the great principles underlying pathological processes, and will learn something of the theories of disease, which will enable him to understand the facts revealed to him in the post-mortem room. He should remember that this course of lectures is not completed in one year, and that if he attends the lectures for three consecutive years he will each time hear different subjects treated of. If it is in the summer session that a student is released from his anatomical studies, he should begin to learn pathology at Dr. Bainbridge's lectures and at the winter demonstrations (Dr. Fawcett and Mr. Steward, Monday, Wednesday and Saturday, 9.15, in class-room No. 3). Here he will be introduced to the treasures of the pathological museum. Selected specimens will be brought from the shelves of the museum for his inspection, and the effects of pathological changes upon the various organs of the body will be demonstrated. The subject is roughly divided into medical and surgical pathology, two days a week being devoted to the former and one to the latter. The whole course occupies two years. At the end of each half-hour demonstration on museum preparations, a *vivâ voce* examination is held on typical recent specimens

collected from the post-mortem room and operating theatre.

Valuable as is the instruction afforded by these systematic lectures and demonstrations, they must on no account be allowed to take the place of the daily demonstrations of Morbid Anatomy (Dr. Fawcett and Dr Beddard, 2 p.m.) in the post-mortem room. Here a student gains information on the relative distribution of morbid processes throughout the body, and learns to verify the accuracy of his observations at the bedside. No ward clerk must on any account neglect to follow the fatal cases to the post-mortem room, and throughout a student's career there is probably no more profitable way of spending an afternoon unappropriated to routine duty than in watching post-mortem examinations. Although several of the examining boards require students to have held the appointment of post-mortem clerk, yet all do not do so, but nevertheless it is a post not to be omitted if possible. The man who misses the opportunity while he is at the hospital of becoming acquainted with the many difficulties that may be encountered in making a post-mortem is sure to regret it afterwards.

The practical use of the microscope in solely pathological problems should be learnt as early as possible. With this object the course of Microscopical Pathology (Mr. Bellingham Smith and Dr. Eyre, Tuesday and Friday at 9, in the New Histological Laboratory) should be attended in the first winter session after the student gets into the wards. Here he will gain his first instruction in practical Bacteriology, which he will have constant opportunities of making use of in the wards. Here he will also amplify the knowledge he has already acquired, in the course of Normal Histology, of section cutting and staining, and have demonstrated to him the microscopical appearances of tumours and diseased tissues. A man cannot often find time to attend this course more than once, but he should attend it early in his career and work hard to learn enough about technique to enable him to examine specimens that constantly come in his way while holding senior appointments. Morbid histology and bacteriology are very engrossing studies, and many good men fight shy of them on account of the amount of time they fear they will "waste" over them. But a man of method can generally find a good many spare moments to devote to this work without seriously interfering with his reading, and he who acquires the hobby will find it a useful one to ride when he has accomplished his examinations and is waiting for patients.

It should be noted that special classes to meet the requirements of Cambridge and other university students have recently been started, in which Dr. Beddard goes over the main points of General Pathology.

Pathology is progressing so rapidly, and its scope is so extensive, that no one text-book can deal with all its branches. The systematic lectures present in their most modern form the main principles of general pathology; they may be supplemented by the perusal of the pathological articles scattered through Allbutt's Medicine, or of Barlow's Manual of Pathology. Muir and Ritchie's Bacteriology will be of value to those who are taking that course. But no text-book can teach the student either morbid anatomy and histology, or bacteriological technique; he must learn these things by constant practice and attendance at the demonstrations.

BACTERIOLOGY.

The compulsory course in Bacteriology forms part of that in microscopical pathology. As in previous years, the first two months will be occupied by this subject. The rudiments of the science are taught practically; the methods of staining sputum, pus, etc., to demonstrate bacteria; the methods of collecting morbid products for bacteriological investigation; in fact, the technique of the examinations which can be undertaken in connection with the ward work.

A course is also held in the Bacteriological Laboratory during the months of November and December, covering practically the same ground, and is largely intended to meet the requirements of qualified men and students other than Guy's men.

Two optional systematic courses, each of about two months' duration, are held, beginning in January and May respectively, especially intended for Final M.B. men and candidates for the various diplomas in Public Health. The course consists of lectures and demonstrations on the morbid secretions and excretions, the bacteriology of water, milk, air, food, and pathogenic protozoa; the study of recent work on susceptibility, immunity, and allied subjects. The students are instructed in the practical details of media making, culture and staining methods, and they individually examine the more common pathogenic and non-pathogenic bacteria.

THE SURGICAL WARDS.

In the surgical wards there is a division of labour, and corresponding to this division, the appointments fall into two classes—clerking and dressing. The student's first introduction to clinical work is as clerk in the surgical wards, and it is not unlikely that he may, on his first entry, be a trifle discouraged. The reasons for this are obvious. Entirely ignorant of surgery and even of the terms in common use, he is at once required to write full accounts of the cases admitted to the wards. He will find, however, that by paying attention to the advice we give him, that his difficulties will be found to be anything but insurmountable.

Being the junior appointment in the hospital, there is a tendency in the minds of some, and a little more than a tendency in the minds of others, to belittle the post. That is unjust, and is the result of ignorance of the real functions of the surgical clerk. What the medical clerk is to the medical side, the surgical clerk is to the surgical side. The post is junior in point of time, but does not necessarily carry with it any stigma of

inferiority. Their duties are identical: the preparation of the permanent hospital records of the cases admitted to the wards. What difference there is consists in this: the machinery of the medical side is less complicated than that on the surgical; whereas the whole of the work in the medical ward falls on the clerk, in the surgical wards it has been found advisable to specialise and to separate—for the sake of greater proficiency—the duties of clerking and dressing. This separation has thoroughly been justified by the results, the chief difficulty being the dependency of the clerk on the dresser for many details of importance. Dressers should, therefore, remember that from them the hospital expects such assistance as will render the reports as complete as they can be made. On the clerk, however, rests the responsibility, and the excellence of his reports is a sure indication of smooth working and mutual assistance in the firm to which he belongs.

The most important point for a clerk to remember is that in after years cases and not book work will form his mainstay in practice, and that he cannot too soon get the clinical entity and results of treatment into his memory.

The appointment of an overseer to each firm of clerks in the person of a clinical assistant in the surgical wards is of inestimable value, primarily to the clerks, secondarily to the whole firm. The clinical assistant should be the immediate "ear" of all his clerks, to instruct them of their duties in the wards, also relieving the surgical registrar of many details in the filling in omissions of the reports of his firm.

We do not wish to exalt the clerk unduly, but to insist merely that in his work the same care and attention to detail, the same knowledge of surgery and human nature are as necessary as in other appointments. Let him bear in mind that to him is given by the hospital the task of keeping its records. These are bound and kept, and by his work thus perpetually in evidence a man is judged. Bad reports are a lasting disgrace; good reports a lasting honour. The importance of good careful work by the clerks cannot be over-estimated. In the nature of things it cannot be perfect, but it must be as perfect as he can make it. By his first work in the wards he will be judged, and he will find that it is very hard to live down a bad clerkship. At the same time that he bears in mind the difficulties and responsibilities of his post, he should remember that he is a junior, and that any assistance he can lend his seniors should be offered ungrudgingly, and in return for this he will undoubtedly meet with that consolation and help in his work which is so necessary. There is no loss of dignity sustained in carrying screens to patients, or in the thousand and one small opportunities which present themselves of helping the other workers in the wards.

To the dressers we would submit that the performance of dressing is no part of the clerk's duty, and that it is no kindness to him to request him to undertake what he cannot from his position with good grace refuse, and what nevertheless he is unfitted to do.

The work of the firm, as a whole, should be the interest of each individual member of it. Pride should be taken not only in its splinting and dressing, but also in its reporting. A good house-surgeon and a good dresser will see that the reports are not below the level of those of other firms, for as they represent the work of the firm the individual members should see that they give a fair and accurate idea of that work. The clerk, aided by the clinical assistant, from this point of view is to be regarded as the mouthpiece of the firm to succeeding generations. The firm should see that he represents it fairly. It is essential that either the clerk should live within walking-home distance of the hospital, or else get a room for the take-in week. All really good casualty work is done at night, and the periods for seeing the actual Crofting and treatment of fractures is all too short as it is.

As soon as he is appointed, he should find out from the surgical registrar to whom he is appointed. A few days before taking over the work he should learn from his predecessor what he can about the cases he is to take charge of, so that the work may be continued as nearly as possible without a break. At the present time there is an entire change of clerks every three months, but in the way indicated above, the break in the work may be obviated to some extent. He should learn quickly to take accurate temperatures, and pulse and respiration rates, and test urine, for without any exception the temperature, pulse and respiration rates, and condition of the urine must be included in the notes of every case on admission. The surgical registrar sees every new case with the clerk on the morning after admission, when he expects a history of every case to be ready. This, if vague, is useless. All symptoms should be set down in exact order, with the dates of their appearance. The exactness in detail is of the highest importance, and is a measure of the care with which the clerk has done his work. He should have a note-book, and should put down in it everything about the case that he can obtain from the surgeon, house-surgeon, clinical assistant, and dresser. This should be copied into the report as soon as possible. We would impress upon each clerk the value of seeing everything done by the dressers or house-surgeons—the operations, putting up fractures, especially when done at night in take-in week, and this should apply to manipulations on every case under the surgeon, and not only to the cases which the individual clerk has to report—as much may be learnt in this way which otherwise can only later be gathered with much greater effort.

He should also attend the practical surgery classes of the surgical registrar, who gives four courses a year, each beginning on the appointment of the new surgical ward clerks, and especially designed for their instruction in all matters relating to that appointment.

Lists of the duties appertaining to each appointment are supplied to the students, and these are to be carefully followed out. The hospital not only expects this, but insists on it. We have laid stress so far on the appointment of surgical ward clerk, as it is the first post that

the student holds, and because he is so often quite unaware of the objects of the appointment.

He will in time become a dresser, and will by that time have learnt the traditions that underlie his office. He should, before accepting office, have acquired most thoroughly the principles of aseptic surgery, and, on no account, ever depart from them subsequently. Let soap and water be his sheet anchor.

The surgical wards are visited every day by the surgeons and assistant surgeons at 1.45. Notice of operations, which usually take place on Mondays, Tuesdays, Thursdays and Saturdays, except for emergencies, is posted overnight in the colonnade by the House-Surgeon for the week. The surgeons are assisted at the operations by the dressers, and no others should stand about the well of the theatre, the only exception being the particular ward clerk to the case.

Although we believe there is no rule which prevents freshmen attending operations and clinical demonstrations, we would point out that such a course of action is useless to them, and is not encouraged by the authorities.

Finally, we should like to repeat that although specialization has provided a clerk responsible for the drawing up of the hospital records, yet as this report is an account of the work performed by the firm as a whole, it touches the honour of every one in it that the report should be an accurate statement of the work done. The firm should be considered the entity, each separate member of which fulfils his own function, each at the same time being dependent on the others for the smooth, even working of the whole. S. R.

ANÆSTHETICS.

One of the most important of the appointments for senior students is that of Clerk to an Anæsthetist. The appointment is best held after that of full dresser, but it may sometimes be done concurrently with the latter appointment, provided that the day the anæsthetist attends does not clash with the days of attendance of the surgeon to whose firm the dresser belongs. The appointment, which is for one month, is now compulsory; that is, every man must have held it before he can present himself for his final examinations. During his month of office the clerk attends one afternoon a week in the operating-rooms, either surgical or gynæcological, or at out-patients' when he administers anæsthetics under the supervision of the anæsthetist. He thus becomes acquainted with the various forms of apparatus, and gains practical experience in the administration of chloroform, ether, and A C E mixture. He also attends one morning a week at 9 a.m. in the dental department, where he has ample opportunities of learning how to give nitrous oxide, nitrous oxide oxygen, and ethyl chloride for dental operations. Before holding the appointment the student should attend Mr. Rowell's course of lectures on anæsthetics, for though this is essentially a practical subject, it is very necessary to know something of the action of anæsthetics and the symptoms occurring during anæsthesia, and also to know what dangerous symptoms to look out for, and the treatment that should be adopted. When making application for the appointment, the clerk may be in doubt as to whether to apply for the out-patient department or for the theatre. Each has certain advantages. The clerk will probably give more anæsthetics at out-patients', but those given in the theatres are usually of much longer duration, and useful experience is gained in keeping patients for some time in the stage of anæsthesia requisite for a prolonged operation. Hence there is but little to choose between the two.

The clerk should endeavour to watch the patient himself, and form his own opinion of the condition of the patient, and not be a mere machine for holding a mask at the direction of the anæsthetist. He should be careful to consider the feelings of the patient, especially when he is dealing with a nervous individual. Suddenly to place a charged A C E cone over a patient's face without a word of warning is to court difficulties, and even dangers, in the administration. He should remember that "bucket faces," sore eyes, sore tongues, split lips and broken teeth are a reproach to an anæsthetist, and that if these accidents occur with private patients his reputation as an anæsthetist will be seriously damaged.

Lastly, it may be suggested that every man, after he is qualified, should take the opportunity, if he can get it, of giving a few anæsthetics for emergency cases in the hospital in order to get accustomed to the responsibility of giving anæsthetics quite "on his own."

DAYS AND HOURS OF ATTENDANCE ON HOSPITAL PRACTICE.

Accidents and urgent cases of all kinds are admitted by the St. Thomas's Street entrance at any time of the day or night.

The Wards.

Medical Wards.—Dr. Taylor (2), Mondays, Thursdays and Fridays. Dr. Hale White (2), Mondays, Tuesdays, Thursdays and Fridays. Dr. Pitt (2), Mondays, Tuesdays, Thursdays and Fridays. Sir Cooper Perry (2), Mondays, Thursdays and Fridays.

Surgical Wards.—Mr. Golding-Bird (1.30), Mondays, Tuesdays, Thursdays and Fridays. Mr. Symonds (1.30), Mondays, Tuesdays, Wednesdays, Thursdays and Fridays. Mr. Lane (1.30), Mondays, Tuesdays, Thursdays and Fridays. Mr. Dunn (1.30), Mondays, Tuesdays, Thursdays and Fridays. Operations (1.30) daily.

Obstetric Ward.—Dr. Horrocks (2), Tuesdays and Fridays. Mr. Targett (2), Mondays, Wednesdays and Thursdays.

Ophthalmic.—Mr. Eason (2), Mondays and Thursdays. Mr. Ormond (2), Tuesdays and Fridays. Operations (2), Tuesdays and Thursdays.

The Out-Patient Department.

The days and hours of attendance in the Out-Patient Department of the hospital are as follows:—

Medical Cases.—Dr. Shaw (1), Fridays. Dr. Fawcett (1), Thursdays. Dr. Beddard (1), Wednesdays. Dr. French (1), Mondays.

Surgical Cases.—Sir Alfred Fripp (1), Thursdays. Mr. Steward (1), Mondays. Mr. Fagge (1), Wednesdays. Mr. Rowlands (1), Saturdays.

Obstetric.—Mr. Bellingham Smith (1), Thursdays and Saturdays.

Ophthalmic.—Mr. Eason (1), Tuesdays and Fridays. Mr. Ormond (1), Mondays and Wednesdays.

Dental.—The Dental Staff (9) every week-day.

Aural.—Mr. Fagge (1), Tuesdays.

Skin.—Sir Cooper Perry (1), Tuesdays.

Throat.—Mr. Steward (1), Fridays.

Electricity.— (12 and 3), Wednesdays.

DENTAL SCHOOL.

The dental student is supplied at the Medical Office with the Prospectus, Standing Orders, Notes on Probationary Work, List of Instruments, Calendar, and Clubs' Union Book.

These pamphlets should be carefully perused in order that acquaintance may be made with the general arrangements of the school and the scope of the work upon which the student will become engaged.

Instruments should be purchased at one of the dental depôts, and the student should satisfy himself that he has been supplied with all of those described in the hospital list.

Probationary work upon the phantom head will occupy the freshman's time for about two months. This operative course is conducted by the staff demonstrators, and is very comprehensive. It includes most of the conservative operations that the student will subsequently be called upon to perform upon patients, namely, gold and other fillings, crowns, inlays, and the treatment of devitalized and septic teeth. These manipulations upon the dummy, when done in a thoroughly sound manner, form a capital ground-work in operative dentistry. It may be mentioned in passing that too much stress can scarcely be laid upon the necessity of becoming an expert operator, for the public is not slow to appreciate the highest manipulative skill.

During the current year pupils in Dental Mechanics have for the first time been received at the hospital, and a systematized and graded course of instruction is carried out.

The regulations of the Royal College of Surgeons of England require that students shall pass two professional examinations for the dental licence. At the first professional examination certificates must be produced, *inter alia*, of having been engaged in the practice of dental mechanics under a registered dental surgeon, or under the direction of the superintendent of the mechanical department of a recognised dental hospital, during a period of two years, and of having manufactured and adjusted six dentures and six crowns.

Inasmuch as it is recommended at Guy's that this examination be passed during the month of May, it follows that the work of the first winter session must be largely devoted to demonstrations, dental mechanics, and lectures.

Students in difficulties about their work and needing advice are invited to consult the Dean, or any member of the Staff, who will be only too pleased to do what they can to promote their interests. W. A. M.

THE CHOICE OF A MICROSCOPE.

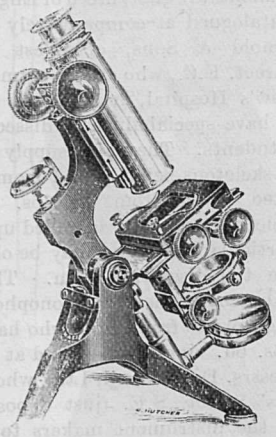
One of the indispensable adjuncts to medical study in these days is the microscope. The glowing tribute which Sir Samuel Wilks has paid to this instrument is by no means an extravagant one, when it is borne in mind how exceedingly helpful towards the acquisition of knowledge in almost all departments of science the microscope has been. To quote Sir Samuel's own words, "It has opened up a new world, and created a new science." Perhaps the student, when he comes to make his first acquaintance with these new fields which the microscope has enabled us to explore, will fervently curse the existence of an instrument which has added so much to his already crowded syllabus of work, but as he becomes more friendly and intimate with bacteriology, histology, and microscopical pathology, he will also become keenly attached to his microscope, so much so, in fact, that—as we hear on good authority—it stands very low on the list of pawnable things that medical students periodically carry under the shadow of the sign of the Medicis.

The choice of a microscope, then, is a serious matter, and we would impress on the new student the importance of exercising proper care and discrimination in his selection of a good instrument. The advice and help of his teachers are always available, and it would be well for him to consult them when he has some special make of instrument in mind. For physiological purposes "the microscope must have two objectives, a $\frac{2}{3}$ inch and a $\frac{1}{6}$ inch, a nosepiece and an indicator fitted to one of the eyepieces. . . . An inferior instrument is worse than useless, for it is essential that the student should buy an instrument which will be of some use to him in future years, when, as a practitioner of medicine, he desires to examine tumours, urinary sediments, sputum, etc., for purposes of diagnosis. Antiquated instruments, such as those sometimes handed down as an heirloom in a family of doctors, are practically useless." In the biology class the student will make his first acquaintance with the use of the microscope, and although here a comparatively simple instrument with a low power suffices for most purposes, he should bear in mind that in his next year, when he comes to study histology, a good compound microscope is indispensable, and that afterwards he will want a superior instrument, fitted with a condenser and an oil immersion lens, for bacteriological work. The ideal way, of course, would be to invest in a thoroughly reliable instrument, fully fitted; but such instruments are expensive, and where money is a consideration to be regarded, a better plan would be to buy a sound stand, by one of the

recognised makers, to which the various necessary addenda, such as revolving stage, condenser, etc., can afterwards be fitted. At first the two objectives above stated will serve for all practical purposes; later, an oil or a water immersion becomes necessary, while a triple nosepiece is desirable as well.

There are many standard makers whose names are recognised guarantees for the excellence of the instruments they manufacture. Of foreign makers, Zeiss and Leitz are, perhaps, the best known, and if the student is fortunate enough to be able to invest in one of their better-class instruments, he need have no fear that he will afterwards regret his purchase. These instruments can be purchased at most shops where microscopes are sold, and the Zeiss Company possesses a London agency in Margaret Street, Regent Street, W.

One of the best and most reliable English microscopical firms is that of Messrs. W. Watson & Sons, of 313, High Holborn, W.C. They recommend their "Edinburgh Students' Microscope, Stand H" type,



which is a sound, reliable instrument, thoroughly satisfactory for all practical purposes. Fitted with their parachromatic objectives and one eyepiece, this is priced at £12 15s. Afterwards, an Abbe illuminator, two additional objectives, including an oil immersion and triple nosepiece, can be added for about £9, or, if so desired, the complete set, suitable for bacteriological work, can be bought for £21. This stand is fitted with a mechanical stage. A cheaper make, but also a reliable instrument, is their "Praxis Microscope," which is listed at £6 10s., without condenser or nosepiece, or complete for bacteriological work at £15 15s. These prices may seem high, but in reality they are by no means extravagant. It is far better to invest in a good instrument, and to pay a little more for it, than to buy a cheap microscope which will afterwards have to be exchanged or sold at a loss when the student wishes to work at bacteriology, or at that fascinating branch of microscopical work—micro-photography.

Mr. C. Baker, of 244, High Holborn, W.C., lists several excellent instruments, of which his well-known "D. P. H." model, No. 1, is in every way a reliable instrument. The stand alone costs £11 11s., and the complete instrument, fitted for bacteriological and blood examination, is priced at £22. Slightly cheaper, but for all practical purposes equally good, is the "No. 2 D. P. H.," which, when fitted complete, costs £18 18s. A slight extra charge is made if the student wishes to have Zeiss lenses or Leitz objectives fitted instead of those supplied by the firm. This firm also supplies a useful and serviceable instrument for histological work, "The Model Histological Microscope," at £6 17s., to which afterwards a condenser and oil immersion can be fitted for bacteriological work.

Other good makers are Messrs. Swift, whose instruments are slightly lower in price; Messrs. Crouch, who supply several instruments suitable for students, and Messrs. Ross. From all these makers catalogues and specifications may be obtained on application. Messrs. Millikin and Lawley, of 165, Strand, W.C., list a good serviceable article in their "Stand A." model, which, fitted with mechanical stage and two objectives, and triple nosepiece, is priced at £7 6s., and to which a condenser can easily be fitted. All these instruments we have mentioned are thoroughly reliable, strongly and firmly made, and possess the usual fine and coarse screw adjustments.

For bacteriological and blood examinations the student will need an oil immersion. This can be got from any reputable maker. The Zeiss and Leitz oil immersions enjoy a world-wide reputation for excellence, although they are a trifle more expensive than those by English makers. Messrs. Watson & Son make a speciality of objectives, and their "Parachromatic series" is specially suitable for students. Their $\frac{1}{8}$, priced at £1 10s., which is supplied with their instruments enumerated above, is a particularly fine lens, giving an exquisitely crisp definition, combined with a flat field and a good working distance. Their $\frac{1}{10}$ water immersion is listed at £4, while their $\frac{1}{12}$, a new lens specially intended for the bacteriological student, is listed at the same price. They also supply a $\frac{1}{16}$ oil immersion (magnifying up to 3200 diameters, with a holoscopic eyepiece) at £6. Mr. Baker supplies a sound, reliable $\frac{1}{12}$ at £5, and a $\frac{1}{16}$ oil immersion at £6. A Zeiss oil immersion costs £8, a Leitz, £5, and a Reichert also £5. With most of these a bottle of immersion oil is supplied.

If the student is unable to go to the expense of buying a new instrument, he can often obtain a good second-hand microscope at a comparatively cheap price, and in the same way an oil immersion lens may be bought. It is advisable, in buying a second-hand instrument, to obtain it on approval, and give it a thorough trial before completing the purchase. Sometimes a bargain may be picked up at a pawnshop, or a second-hand dealer's shop; but there are several firms which deal in second-hand microscopes, and the student cannot do better than give these a trial. Their instruments are generally in good order and well preserved; in many cases nearly new. Messrs. Millikin & Lawley have a large number of

second-han nstruments and lenses in stock by all the recognised makers, which they list at prices much below those charged for new instruments. Mr. Clarkson, 338, High Holborn, W.C., is another dealer in second-hand instruments whose stock is well worth inspection. At present he has several good instruments and lenses for sale, among them being a fine Swift stand fitted with 3, 7 and 12 Leitz objectives at £16 11s.; a Leitz oil immersion at £3 15s.; a Zeiss water immersion at 30s., and several Reichert, Ross and Swift objectives at comparatively cheap prices.

For histological work, the student will find a slide box, or cabinet, to contain his finished slides desirable. These may be bought at any microscopical instrument makers, the nearest being probably Messrs. Stanley, whose place is close to London Bridge Station.

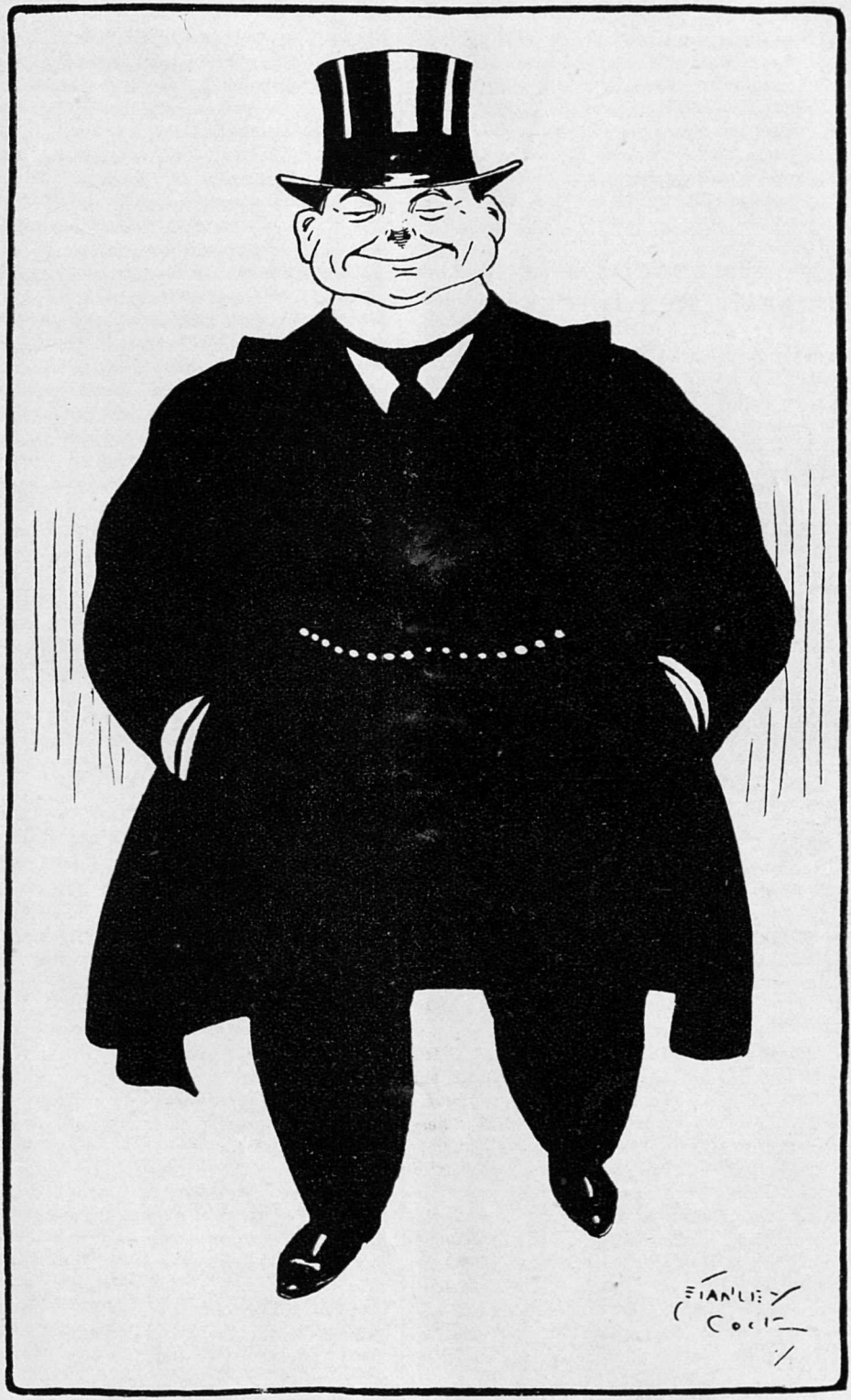
INSTRUMENTS.

Both in the wards and in the dissecting-room and the physiological laboratory, the student will find that he needs several instruments. In the wards he will want a stethoscope, dressing instruments, tape measure, etc., and in his previous work a dissecting case is an absolute essential. The number and choice of his instruments depend to a large extent on himself. If he is sufficiently keen to think it necessary that he should possess a blood count apparatus, pocket spectroscope, and a good ophthalmoscope, his outlay will of course be considerably in excess of what he would spend were he to rest content with possessing the absolutely indispensable only. But such outlay, we would venture to remind him, will not be money thrown away. In after years he will find the possession of these instruments not only a great help but a sound investment, provided he has invested in good instruments, which will stand the wear and tear of hospital practice. It is true all the wards possess a certain number of necessary instruments, lists of which are affixed to the cupboards where they are kept. But the advantage of possessing an instrument of one's own, independent of those that the hospital provides, is obvious. Personal possession means personal interest, and though familiarity may breed contempt, it has its advantages.

There are many instrument makers in London, the majority of whom make a point of catering for the new student. We would not advise anyone, however, to write for a catalogue of surgical instruments. These bulky volumes are so large, and contain so much, that the average student will find it a work of some difficulty to make his choice from amongst the many and various models submitted to him. Rather would we advise the new man to find out from his teachers what he needs for his work, to make a list of such instruments as he requires, and then to go to one or other maker whom he has selected, and choose his necessities from their stock. We therefore merely give the addresses of some of the better known firms, along with a few particulars of the items they stock for students.

Messrs. Allen & Hanbury, Ltd., Plough Court, Lombard Street, E.C., a firm within easy walking distance of the hospital, have a large and varied selection of surgical and other instruments. Their dissecting cases range from 10s. 6d. upwards, and are excellent value at the prices listed. They supply a special binaural stethoscope with flexible metal tubing at 12s. 6d., and have a large selection of students' dressing cases, fitted and unfitted. This firm also manufactures various models of hypodermic syringes, ranging in price from 2s. 6d. to 8s. 6d., and lists all the usual blood-counting apparatus. Their instruments are of English manufacture, thoroughly sound and reliable, and satisfactory in every way. Messrs. S. Maw, Son & Sons, 7–12, Aldersgate Street, E.C., have an equally large stock open to inspection. They list a large number of useful stethoscopes ranging in price from 4s. 6d., to an improved pattern with finger rest, catalogued at 8s. 6d. They also supply dissecting cases, dressing cases, and have in stock every kind of apparatus the student may find useful or necessary. Their instruments are guaranteed of English manufacture, and are catalogued at comparatively moderate prices. Messrs. Arnold & Sons, of West Smithfield, and Giltspur Street, E.C., who are instrument makers to St. Bartholomew's Hospital, manufacture their own instruments, and have special lines in dissecting and dressing cases for students. They also supply excellent sets of bones, half skeletons being priced from £2 19s. 6d., and disarticulated skulls from £1 15s. These sets are specially selected and may be relied upon to be sound. Further particulars of these may be obtained from Mr. Hancock in the dissecting-room. This firm lists a patent stethoscope, their "Phonophore," which has obtained high praise from those who have used it. It is priced at 6s. 6d. single tubes, and at 12s. 6d. binaural model. Messrs. Down Bros., Ltd., whose address is 21, St. Thomas' Street, S.E. (just opposite the hospital gates), are the instrument makers to Guy's Hospital, and the instruments turned out in their factory are as excellent examples of their kind as one could wish for. The student would do well to give Messrs. Down a call and inspect their large and varied stock of dissecting cases, dressing cases, midwifery bags, and last, but not least, their overalls. An overall is a necessity for the ward clerk, and by far the majority of overalls in this hospital have come from Down's. The firm supplies all apparatus necessary for work in the wards or in the laboratories, and all their material is of the best quality The Holborn Surgical Instrument Company, Ltd., 26, Thavies Inn, Holborn Circus, E.C., have also a large stock of instruments, at comparatively cheap prices, while Messrs Millikin and Lawley, Strand, London, W.C., have always on hand a large variety of new and second-hand instruments and bones.

At all these firms the student may obtain blood-counting apparatus, ophthalmoscopes, pocket spectroscopes and other desirable, if not absolutely indispensable, instruments. Messrs. Watson & Sons of 313, High Holborn, and Mr. Baker, of 244, High Holborn, however, list special sets of blood-counting apparatus designed fo r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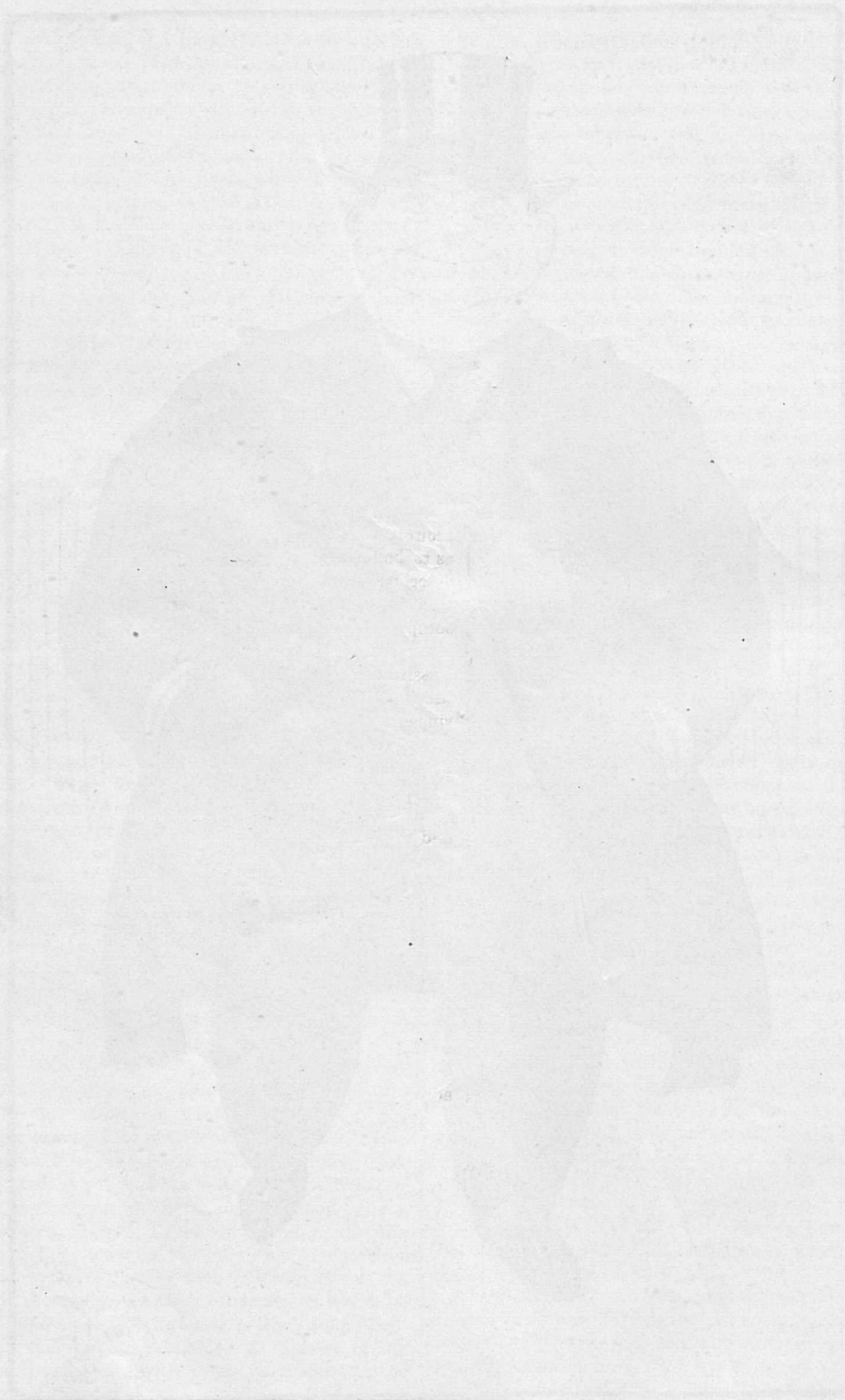

students and clinical use, and in addition stock several sets of microscopical apparatus, including stains, etc. Messrs. Stanley, Station Approach, London Bridge, who are opticians to Guy's Hospital, have a large and extensive stock of microscopical apparatus, such as slides, specimen boxes, etc., and their shop is conveniently situated for those who cannot afford much time. Their articles are of excellent manufacture, and thoroughly satisfactory.

As in the case of microscopes, the student can often obtain second-hand instruments at a comparatively cheap price. Sets of bones discarded by those who have no longer any pressing need for them may often be picked up cheaply, and the student would do well to interview the dissecting-room attendant (or the commissionaire who will usually be found in his den underneath the Medical School Buildings). From both second-hand scalpels, forceps, or complete dissecting cases may sometimes be obtained. In buying second-hand instruments the student should assure himself that the articles are sound and reliable; if at all in doubt his demonstrators will always be ready and willing to help him in deciding whether to buy or leave them. There are several second-hand shops in the Borough at which instruments and bones can sometimes be picked up for a mere song, and those who cannot afford to go to much expense will do well to pay a visit to these places and see what may be obtained there—always bearing in mind that many of the things shown in their windows are comparatively obsolete, and that any instrument decided upon should be tried and approved of before it is bought.

BOOKS.

The student will find that it is as well to buy his books first hand. The proper selection of suitable text-books is no easy matter in these days when the number of available manuals has multiplied so largely, and the advice of the demonstrators is here, as in other matters, of use to the student. There are many publishers from whom the usual text-books may be bought. Messrs. Churchill, of 7, Great Marlborough Street, are the publishers of Taylor, Jacobson, Goodhart, Fagge, White, to mention only a few of their many books. Messrs. Macmillan, of St. Martin's Street, publish Allbutt's System, Foster's Physiology, and a variety of books of special interest to Pre. Sci. men. Messrs. Longmans, Green & Co., of Paternoster Row, are responsible for that indispensable and popular text-book, Gray's Anatomy. Mr. Murray lists the equally widely-read Halliburton's Physiology. Smith, Elder & Co., publishes Ellis's Anatomy, while the firms of Young & Pentland, Philip & Son, and H. K. Lewis, are too well known to need more than passing mention. Mr. H. K. Lewis makes a speciality of his medical and scientific circulating library, and offers special terms to hospital students. Mr. H. H. Grattan, whose shop is half a minute's walk from the hospital gates, is the "official" bookseller to the Hospital, and books may be ordered through him.

Sometimes the student may meet with clean and up-to-date second-hand text-books, and it is always worth while to see what the second-hand dealers can show. Mr. Chas. Sawyer, of 29, New Oxford Street, is one of the oldest and best-known dealers in second-hand medical books; Messrs. Foyle, of 135, Charing Cross Road, is another firm which has a large selection of popular text-books at second-hand prices.

What is a Disease? What is the Meaning of Diagnosis?

It may be asked why the unfledged medical student should be perplexed with the question that the accumulated wisdom of the ages has failed to answer—the question that his lecturers, and the writers of his text-books, unanimously agree to leave alone. I shall try to make the meaning and object of the question clear at the outset; put in different words, it asks whether the symptoms through which disease shows itself in man occur in a series of combinations, so infinite in complexity as to be for ever elusive so far as definition, or accurate description of individual diseases, is concerned; or, whether we shall ultimately arrive at some simple and comprehensive method by which every disease may be made to take its place in an orderly record or natural classification. It is more than thirty years since I began the observation of disease, with the firm belief, as a convinced Darwinian, that there must be a natural method of defining and classifying diseases, and that it must be based on some natural foundation, and not on any artificial system, such as the anatomical. I propose to give the newcomer at Guy's the result of my observation and reflection, in the hope that it may help him as a future, or rather as an embryo practitioner to find his way among the systems of diagnosis and classification that still hold rival sway at the hospital and in the school. Of one thing he must be warned at the outset. The Darwinian holds that symptoms of human disease follow the same orderly sequence of cause and effect that is now recognised in the rest of nature; the belief in any supernatural interference in the course of human disease excludes the conception of the regular, unvarying sequence in events that lies at the root of all that is advanced here. This is a parting of the ways about which there is no discussion; each of us takes his own way as his mental constitution directs him.

In the first place, let me remind the newcomer that medicine consists of two wholly separable parts, and that these parts bear to each other the relation of foundation and superstructure. The pure science of medicine is firmly and truly laid in the solid ground of nature; it is organised knowledge of human disease. On this foundation is raised the superstructure of the art of medicine; this has no relation with the creative arts; it is an applied science, so that whatever practice is based on well-proved knowledge of human disease, is scientific art, the rest is quackery.

It must be borne in mind that in discussing what is a disease and what is the meaning of diagnosis, we are concerned wholly with the pure science, and not at all with the applied science or art of medicine. Another caution must be given to the uninitiated at the outset; the word disease has two meanings that must be carefully kept apart. In the general, negative sense, the word stands in the same relation to health as does cold to heat; disease, when used in the general, negative sense, is simply the negation of health—health standing for our conception of the state associated with normal life; with this meaning we have no further concern, it is plain. The question we have to deal with is, therefore, the meaning to be attached to the word disease when used in the particular, positive sense. Every patient knows, as a rule, when he suffers from disease, when he falls out of health; but it is the special duty of the physician to determine by what particular disease he has been robbed of health. Thus it will be seen that our heading repeats the same query in two different forms, because the problem of diagnosis consists in the determination of the particular disease present in any case. When in any case the disease present has been detected, the fundamental problem of medical science has been solved, under any other circumstances, even by the most elaborate labelling of symptoms; if we say that we have made a diagnosis, we deceive ourselves. I hope the full meaning of this fundamental question is now clear to the newcomer, for on a proper grasping of it will depend the intelligence or otherwise with which he will face his life's work when the day comes for him to launch his little boat on the waters of general practice; he will then become, for the rest of his life, an intelligent and absorbed student of the most fascinating branch of all science, of the natural history of human disease, or he will become a rapidly petrifying, more or less glorified druggist, an unscientific cobbler, mostly of whims and fancies.

Although this question, What is a disease? has never yet been answered in the schools, ancient or modern, it is really very simple, but our path is set about with pitfalls, dug by ingenious philosophers; therefore the simple answer must be given warily. First of all it must be remembered that "the disease" is, like "the dog" or "the cat," an abstraction, drawn from a vast series of observations of natural phenomena. Whatever the philosophers may feel called upon to say of the reality or unreality of the individual phenomena observed applies with equal force to dogs and cats as to individual attacks of disease; therefore this branch of the subject need not be pursued further at present.

What, then, are the phenomena from which, in medical science, we draw our conception of the specific diseases? Let us begin, for instance, with typhoid fever. It is a well and universally recognised specific disease. There are many cases in a great epidemic of typhoid, and they vary much—no two are in fact identical—but there are two factors that all cases have in common; these are, the parasitism of the specific microbe and a widely varying but yet consequent symptom-group. In lead-poisoning, alcoholic poisoning, and so on, we find again an endless variety of symptoms in individual cases, but always two essential factors—poisoning by some specific agent, and a resulting and characteristic symptom-group. The diseases nearly allied to those mentioned, and such as are palpably due to traumatism, cover much the greater part of the ground the student will have to deal with at the hospital; the definition of a disease drawn from these examples will be either of universal applicability or demonstrably false. Every case of typhoid fever presents a reaction just as definite as the reaction occurring in the chemist's test-tube; it is, in fact, a natural process, and consists, therefore, like every other natural process, of cause and effect. Thus from the observation of an enormous series of similar natural processes we draw a conception and call it typhoid fever; it becomes the standard by which diagnosis in every case of typhoid fever is judged.

This is the simple answer to the great question, every known disease represents a series of natural processes, each of them consisting of known cause and recognisable consequence; and so when, in any individual case, effect, *i.e.*, symptom-group, has been correlated with cause, a diagnosis has been made. There is another way of expressing the same definition, whose use will appear later. Every disease is a symptom-group of determinate causation. In the dark ages of medicine the cause was enveloped in a mystery just as deep as that which shrouded the disease itself; you may, indeed, still hear it said that no disease is due to a single cause. The error is easily exposed, for, take typhoid fever again, it is evident that while the parasitism of the microbe is the essential cause of every case that occurs, it is equally evident that no other cause, nor combination of causes, can bring about the same result. The confusion is a survival from the time when there really was very little definite knowledge of the causes of disease; the humoral pathologist, the diagnostician of those days, drew almost exclusively on a cultivated professional imagination to supply a want that he felt but did not understand. The last time I met with the statement by a distinguished physician, it was made in connection with pneumonia; chill and exhaustion were described as the predisposing causes, while the parasitism of the microbe was called the exciting cause. This is a mere misuse of words; chill and exhaustion are contributory circumstances in some individual cases of attack, but the parasitism of the pneumococcus is not only the cause of every case of pneumonia, but the only possible cause. Of the practical bearing of a knowledge of contributory circumstances, I shall have to speak later; but their obtrusion in the way of the scientific definition and classification of diseases is a mere unscientific survival. The newcomer may possibly think that a few palpably definable diseases are being selected from which to draw a definition that would be impossible of application in the general field of disease, but this is not so; nature does not work now

in an orderly way, and now at random; symptoms never occur haphazard nor without definite, discoverable cause. The student of human disease is working in the field of nature knowledge; he is dealing with knowable phenomena only; if one disease consists of knowable cause and recognisable effect, so does every other. If, on the other hand, as your teachers will tell you, diseases are indefinable—not wholly knowable—then there is not, and there never can be, a science of medicine in the proper sense of the word; but there is no halfway-house for the thinker. As a matter of fact, if you turn to the text-books, of which Osler is a good example, you will find that all the diseases mentioned so far, and all diseases of the same nature, are, at least nominally, recognised as such; you will find tuberculosis, scarlatina, lead-poisoning, heat-stroke, classified and diagnosed with the utmost confidence. How, then, is this fact to be reconciled with the continued assertion of the indefinability of diseases? Every disease—every true disease—that is recognised in the text-book is due to a cause of extrinsic origin; in Osler, for instance, the first four hundred pages, or thereabouts, are occupied with the description of true diseases, each representing a series of natural processes, and coinciding therefore with correlated cause and effect; the remaining seven hundred pages are occupied with the description of spurious diseases that must be more particularly referred to. Every true disease has been described as a symptom-group of determinate causation; on the contrary, every spurious disease represents a series of symptom-groups of indeterminate causation. It will thus be seen that just as in detecting any true disease in the individual we are correlating cause and effect—making a real diagnosis—so in detecting any spurious disease in the individual, we are not correlating cause and effect, we are only attempting to make an illusory diagnosis; the definition of the spurious disease excludes the tracing of effect to cause in its detection. Spurious diseases are the inventions, for the most part, of the morbid anatomists, the operating surgeons, and the specialists; their name is legion, and they are being constantly added to; Bright's disease, Graves' disease, Meniere's disease, Hodgkin's disease, infantile paralysis, spastic paraplegia, myxœdema, gout, diabetes, melancholia, hypochondriasis, Hebra's prurigo, eczema, psoriasis, atrophic rhinitis, glaucoma, ophthalmia, bronchitis, appendicitis, adenoids, and so on almost *ad infinitum*. The error underlying these seven hundred pages is very simple, and on this the newcomer must fix his attention; he will be taught in the first four hundred pages to recognise true diseases, and to diagnose them in the individual by correlating effect and cause; in the remaining seven hundred pages he is taught to apply the same word—the specific word disease—to symptom-groups of indeterminate causation. He is, by implication, led to believe that in detecting gout, bronchitis, diabetes, myxœdema, psoriasis, infantile paralysis, or spastic paraplegia, he is making a diagnosis. The nature of the spurious disease excludes the search for cause; therefore its detection in the individual implies the making of an illusory diagnosis. The practical significance of this scientific truth will be pointed out later.

An extraordinary omission in the text-book, of the most vital concern for the future practitioner, must now be mentioned. It is evident that the whole territory of human disease is not covered by diseases of extrinsic causation; as a matter of fact, quite half of the practitioner's time is occupied in the diagnosis and treatment of diseases that arise quite apart from extrinsic causes. For instance, three children are born in apparent good health and are kept under good hygienic conditions, nevertheless, they suffer in early years from diabetes, asthma and epilepsy, respectively; middle-aged men, who are exposed to unphysiological stress, break down and show very definite symptom-groups; old men show equally definite morbid symptoms, although the only cause of disease present is prolonged wear and tear. In other words, intrinsic weakness, unphysiological stress and wear and tear are among the most prolific causes of disease with which the practitioner has to deal. All known causes of disease fall naturally into two main divisions, the extrinsic and the intrinsic, and yet the text-book does not even mention that there are diseases of intrinsic causation. The student will soon be able to satisfy himself that diseases such as diabetes, asthma, epilepsy, hysteria, and so on—when of purely intrinsic causation—are not one whit less definite in symptoms, origin, course and result, than are diseases of extrinsic causation. The prominence given in the text-book to a vast number of spurious diseases, and the omission of one of the primary divisions of true diseases explains, at once the extraordinary mental attitude of writers when they describe accurately many true diseases, and yet adhere to the statement that they really do not know what a disease is; silence on the subject of the definition and classification of diseases is the only way of escape from a wholly illogical and futile position. The student is thus taught in the text-book to class together, for diagnosis, people who show similar symptom-groups, although they are due in different cases to wholly different causes; among "diabetics" and "asthmatics," for instance, the cause is sometimes intrinsic and sometimes extrinsic in origin.

The position may be summed up for the newcomer in this way; before he plunges into the detail of hospital work let him make sure of the difference between the true disease, representing cause and effect, and the spurious disease, the symptom-group of indeterminate causation, the will-o'-the-wisp of the diagnostician. Every patient he will ever see presents him with a double problem; in the first place, what is the patient's disease—what is the cause of his symptoms? is it intrinsic or extrinsic? and in the second place, what are the contributory circumstances that led to this individual attack?

Now in the hospital, instead of recognising the import of the conception behind the specific word disease, those in authority treat it as "a matter that does not much

matter," and so the newcomer will find that each one of a large and growing number of groups of teachers attaches a different value to diseases and their diagnosis; the morbid anatomist speaks of organic diseases, the surgeon of surgical diseases, and each of the ologists "diagnoses," in some special way, a group of so-called special diseases. It is clear that matters cannot remain as they are, either we must recognise the standard set up in the case of diseases due to parasitism and poisoning and set about bringing the whole of our science up to this level, or we must recede from the position gained during the last thirty years and recognise candidly that there is no standard by which the genuineness of diagnosis may always be measured.

The question of the recognition of diseases of intrinsic causation has a special interest for the newcomer at Guy's that has, so far as I know, never been made generally known. Only recently, in looking over the notes of Dr. Moxon's introductory lecture of 1884, I found the statement that the causes of disease had in the past been divided into predisposing and exciting, but that in the future they would be divided into extrinsic and intrinsic: they belonged, Dr. Moxon said, either to the patient or to his environment. So that the newcomer of to-day is still in time to take his part in fulfilling a prophecy uttered more than twenty years ago by one of Guy's most brilliant sons. Why have these pregnant words lain so long without recognition? for Dr. Moxon has had few equals, and no superior, in his insight into medicine; it amounted, indeed, with him to genius. Careful scrutiny of the rest of the notes shows the cause of the delay, primarily due, I have no doubt, to his untimely death. Dr. Moxon not only did not reach a clear conception of a specific disease, he did not even attempt to formulate it; he never clearly differentiated the two meanings of the word disease, with the explanation of which this article began. This only makes plain what is pretty clear to every student of the history of medicine, namely, that until bacteriology had made known the relation of cause and effect over a large portion of the field of human disease, it was not possible, even for men of genius, to reach the true meaning of diseases and their diagnosis; there was too great a lack of real knowledge of the causes of disease, and further, men's minds were still too powerfully dominated by the belief in supernatural interference in the course of human disease to take advantage of the scientific advance of the last century. To those of us who are old enough to remember the Darwinian controversy at its height, it is no matter of wonder that the medical world has lagged behind in the application of the theory of evolution, considering how much more personal are the problems of medical science than those of natural history, apart from man's individuality. But now the time for advance has come, and it is the privilege as well as the duty of Guy's to take the lead in justifying Dr. Moxon's words; the work of describing and classifying diseases on the basis of causation has been begun; the whole profession must complete the work so far as present-day knowledge is concerned.

So far we have been dealing with pure theory, but the objects of our profession are, ultimately, wholly practical; the pure science is cultivated simply and solely that it may serve as a sure foundation for the art of medicine; all medical theories must be judged by this standard. That a clear and definite conception of diseases and their diagnosis is essential for the practitioner is palpable. We deal in the first place with symptoms, and in proportion as we understand the cause of the symptoms present, and the circumstances that lead to their attacking each patient, shall we prove successful in their management; in short, diagnosis must precede treatment, and it must be genuine; this calls for no enforcement. But there is a far wider view of the relation of science and art in medicine that is, unfortunately, much obscured for the newcomer in the haste and press for efficient treatment at the hospital; this arises naturally in dealing with a great segregation of sick people. The dominant note in the past was cure, the dominant note in the art of the future will be prevention. The student can hardly realise this for himself until his turn comes to take charge of people under ordinary conditions of life, where the great majority enjoy fairly good health. The old art that limited its conception of treatment, practically, to the cure of already established symptoms, and then almost exclusively by the use of drugs, must now soon give way to the new. No symptoms of disease ever arise in the absence of some natural, discoverable cause, and no disease-cause, once fully understood—be it intrinsic or extrinsic—is altogether beyond control. The practitioner of the future, the newcomer of to-day, must learn to bear in mind every cause of disease; they may all be grouped under less than a dozen heads, so that he may learn to forestall their effects. The old art has reached its zenith in the development of surgery, and the minor special branches into which treatment—*i.e.*, cure—has been divided; but both the general practitioner and the general public are beginning to realise the futility of waiting supinely for the establishment of symptoms, so that they may be cured by the special expert indicated. A proper conception of the relation of science and art cannot fail to revolutionize the present state of things; the specialists have made fortunes in attempting to cure gout, lateral curvature, adenoids, eczema, psoriasis, and so on, but the time has come for the student to trace, while he has the hospital material at his disposal, every channel of causation by which these and all other symptoms of disease reach the patient, so that he may be ready to practise the beneficent art of prevention that will be more and more expected of him.

And now the question arises—even supposing the problems of diagnosis are set by nature, and so are really the same for the hospital as for the family physician, even supposing that the relation of science and art, of diagnosis and treatment is as here described—is it possible so to modify hospital methods that they shall tally with the method that can alone avail for the practitioner? Where no one is seen but the sick, cure must to a great extent monopolise attention; "surgical treatment" is far more urgent and far more satisfactory, at the

hospital, than "medical treatment," and yet in ordinary life surgery is but a very small part of the art of medicine, but it is a vital part; he who is not prepared to undertake tracheotomy, herniotomy, amputation, at a moment's notice is not fit for country practice; therefore the segregation of the sick is essential for the training of the practitioner. But behind the hospital is the medical school whose sole object is the training of the practitioner; here science and art must be made to occupy their proper relative positions so that no one shall misunderstand. The good of the patients is of course the first consideration, but everyone who treats them is also a teacher of the school. To take an extreme case, even supposing it were necessary that a special person should treat the rashes of the skin, it is essential that every student should understand clearly that these rashes are symptoms and not diseases; he ought to be told at the outset, what he will find out for himself later, that unless he can understand the cause of eczema, psoriasis, and Hebra's prurigo in the individual case, he will be no nearer their successful management by dubbing them diseases; he will be further from it, for to label symptoms diseases not only throws no light on their nature, it stereotypes ignorance. This is the crucial point for the newcomer; if he will but keep his eyes open he will find that the morbid anatomist, the surgeon and all the specialists agree to call symptoms diseases, whenever their special practical work necessitates it.

There is one way, and that a very simple one, of filling up the gulf between the hospital methods and the method that has been described as essential for the future practitioner, and that is by reinstating the diagnostician at the entrance to the hospital, so that in no case shall the patient effort to correlate cause and effect be omitted. So long as the demonstration of symptoms in the organs (p.m.) or their local prominence during life in skin, eye, ear, throat, nose, heart, or in the workings of nerves or brain, is officially made a pretext for calling symptoms diseases, and so long as the detection and naming of these symptoms is made to pass for diagnosis, to take the place of the correlation of cause and effect, so long will the school fail to produce a reliable guide for the newcomer, for the future practitioner, and so long will it fail to answer the plain question of the old practitioner, What is a disease; what is the meaning of diagnosis?

BOOKS, ETC., RECEIVED.—Dr. Fletcher's Short Practice of Medicine, Sir James Sawyer's Insomnia, The Birmingham Medical Review, Gaceta Medica de Costa Rica (for June and July), Journal of the Royal Army Medical Corps, The Dublin Journal of Medical Science, The Metropolitan Asylums Board Report on Return Cases of Scarlet Fever and Diphtheria for 1902, 1903, 1904, The Medical Review, Dr. F. W. Morton Palmer's Variations in the Hydrochloric Acid of the Gastric Contents in Cases of Carcinoma in Man.

Guy's Hospital Clubs' Union.

THE FORMATION OF THE CLUB'S UNION, by the amalgamation of the various constituent institutions, took place in the summer of 1891. The objects of the amalgamation are to further the interests of the clubs and societies existing at the hospital by their mutual support, and to simplify the collection of subscriptions. By the payment of an annual subscription (see Clubs' Union Blue Book, p. 12) to the Clubs' Union, any student of the hospital can obtain the privilege of membership of the constituent institutions.

THE GROUND OF THE CLUBS' UNION, which is under the control of the council, is situated close to Honor Oak Park Station, on the London, Brighton and South Coast Railway, and to the Crofton Park Station on the South Eastern and Chatham Railway. It is nine acres in extent, and is the headquarters of the Guy's Football, Cricket, Athletic and Lawn Tennis Clubs. Under such restrictions as are found necessary by the committees of the several clubs, and are approved by the council of the Clubs' Union, every member of the Union has opportunities of practising and taking part in matches, and in the various sports and games. There is a large pavilion upon the ground, with dressing and lavatory accommodation. Refreshments can be obtained by members of the Union according to the tariff of the Students' Club.

THE HOSPITAL "BLUE."—The "Blues" Committee, consisting of two representatives from each associated club, award "Blues" and "Half-Blues" to members of the following teams:—Rugby Football, Association Football, Cricket, Athletic, Lawn Tennis and Water Polo, after considering the list of men suggested by the various Clubs' Committees through their delegates. Blues are awarded half-yearly, at the end of each session, so that the Rugby Football team be represented by fifteen Blues, the Association Football by eleven Blues, Cricket by eleven Blues, and Lawn Tennis by six Blues. Blues and Half-Blues are awarded for Athletics, dependent on the recommendation of the Athletic Committee according to the performances at the Inter-Hospital Sports, while there are allotted to the Water Polo seven Half-Blues.

CONSTITUENT INSTITUTIONS.

THE FOOTBALL CLUBS.—President: Frederick Taylor, Esq., M.D. Rugby—Captain: S. McK. Saunders. Hon. Sec.: J. P. Jones. Captain 2nd XV.: C. G. Sprague; Vice-Captain: L. L. C. Reynolds. Captain 3rd XV.: G. B. Cockrem, and a committee of five, one representing each year. Association—Captain: P. V. G. Pedrick. Hon. Sec.: H. R. Bastard. Captain 2nd XI.: K. H. Hole. Captain 3rd XI.: W. Ingram, and a committee of five, one representing each year.

The Rugby Football Club has now been in existence for over sixty years, the season 1905–6 being the 62nd. Very little is known about its early history. Among the many brilliant players who at one time or other have appeared for Guy's may be mentioned the following International footballers: — A. W. Pearson, W. W. Pinching, A. H. Jackson, L. Stokes (captain 1877–8), A. S. Taylor, W. G. Mitchell, A. Allport, H. W. Dudgeon (England); H. M. Jordon (Wales); R. Evans (Scotland); F. O. Stoker (Ireland); and E. Morgan (Wales).

In 1874 the Inter-Hospital Challenge Cup was instituted, which Guy's was fortunate enough to secure for the first time. Since its institution, St. Thomas's has held the Cup ten times; Guy's, ten times; London, four times, St. George's, three times; St. Bartholomew's, twice, and Middlesex and St. Mary's once each.

In 1891, Guy's, Middlesex and St. Thomas's were left in, the ties not being played out.

Last year we beat St. Bart.'s, King's and St. Mary's, thus reaching the final, when London beat us, thus regaining the Cup which they lost the previous season. Our second XV., after playing St. Bartholomew's second XV. three times before a definite result was arrived at, entered the final only to be beaten by London Hospital. We hope to have a good team this year, and if the men will only evince the same keenness as in the past few years, both cups ought to adorn the smoking-room once more. All the three fifteens have excellent fixture lists this season, and trial games will be held, the first being fixed for October 4th, at Honor Oak Park.

For the benefit of freshmen in particular, we may state that lists will be put up in the smoking-room, on which intending players should place their names as soon as possible.

The officers of the club will at all times be very glad to give any information in their power.

The Association Football Club began its career in 1882, and has been carried on with much success since that time. In 1886 the Inter-Hospital Challenge Cup came into existence, and was won by Guy's for the first four years after its institution; during these years the Hospital twice won the Surrey County Challenge Cup. In 1894, 1897, 1903, and 1904, we again secured the Inter-Hospital Cup, making in all eight times. Reviewing last season, it may be said to have been a most successful one—sixteen matches being won, five lost, and one drawn. We were beaten in the third round of the Surrey Senior Cup, and wound up a most satisfactory season by bringing back the Inter-Hospital Cup. Most of last year's team are available for this year, and a good season is anticipated. The 2nd XI. had an eminently successful season also, restoring the Junior Cup to the Smoke-room after an absence of three seasons. The 3rd XI. played frequently, too. Early in October, trial games at Honor Oak will be arranged, more especially for the benefit of freshmen, and it is hoped that no freshman interested in "soccer" will hesitate for any reason to avail himself of this opportunity of proving his worth on the field, for it is largely on the result of these games that his later inclusion in the team depends. Notices of the trial games will be duly posted in the Smoking-room of the College. In the next issue of the GAZETTE a complete list of the season's fixtures will be given. The Club has entered for both the Surrey Senior and the Junior Cups.

THE ATHLETIC CLUB.—President: R. Clement Lucas, Esq., B.S., F.R.C.S. Hon. Secretaries and Treasurers: W. H. Watson and H. N. Eccles; and a committee of eleven. The annual summer meeting of the Athletic Club is held in June at the Clubs' Union Ground.

THE HOCKEY CLUB.—President: F. J. Steward, Esq., M.S., F.R.C.P. Vice-Presidents: A. W. Ormond, Esq., F.R.C.S., and C. H. Fagge, Esq., M.S., F.R.C.S. Captain: M. Leckie. Vice-Captain: G. W. Dryland. Hon. Sec. and Treasurer: C. B. Ticehurst. Committee: F. Kahlenburg, G. Y. Thomson, R. A. Rankine, F. Morres, H. H. Moyle.

The Inter-Hospital Hockey Cup has been in official existence for three years, and Guy's were the winners in the initial season, viz., 1903-4. Last season St. Thomas's beat Guy's in the final by 2–0, after a hard and even game.

We have, unfortunately, no ground, but a team will be entered for the Inter-Hospital Cup Ties, which take place after Christmas, and in view of this fact it is to be hoped that all freshmen playing Hockey will make themselves and their qualifications known to the officials of the Club. Some matches are arranged for the early part of next year.

For the benefit of new and old members, it may be mentioned that the majority of last year's players have joined the Blackheath Club.

THE RIFLE ASSOCIATION.—President: Sir Alfred Fripp, M.S., C.B., C.V.O. Vice-Presidents: G. Newton Pitt, Esq., M.D., L. A. Dunn, Esq., M.S., F.R.C.S., A. P. Beddard, Esq., M.D., E. I. Spriggs, Esq., M.D. M. S. Pembrey, Esq., M.D. Captain: R. E. French. Hon. Secretary: H. J. Henderson, and a committee of five.

The Rifle Club is a constituent unit of the Clubs' Union, and all members of the latter are members of the former without extra subscription. Men who are not members of the Clubs' Union can join the Rifle Club by payment of an annual subscription of five shillings.

The club was founded in 1883, and with the exception of one or two years has flourished since that date. During the season just ended the club has made a successful recovery from the low state that it fell into during the season 1905.

Of the two Inter-Hospital Cups for team shooting, we hold the Bisley Cup, which was won this year with a record score of 270.

A very successful prize meeting was held in July, and thanks to the kindness and generosity of our President,

we have cash in hand to carry forward to the prize fund for next season.

The finances of the club are in so satisfactory a condition that we have this year been able to purchase a rifle for the use of members. The club subscribes annually to the United Hospitals' Rifle Club, thus entitling our members to compete at the U.H.R.C. prize meeting, and also to enjoy all the privileges of membership.

There will be a general meeting of the club during October, at which our President, Sir Alfred Fripp, has kindly promised to take the chair. A notice will be posted in the smoking-room and in the Colonnade as soon as the date is fixed. It is to be hoped that all who are interested in rifle shooting will make an effort to be present, as many important questions will be raised.

Any further particulars may be obtained from the Secretary, H. J. Henderson, who will also be pleased to hear from any new men as to their abilities with the rifle or revolver, as an aid to the selection of teams during the season, which commences next May.

The Swimming Club.—President: Sir Alfred Fripp, M.S. Vice-Presidents: C. H. Fagge, Esq., M.S., R. P. Rowlands, Esq., M.S., Graham Marshall, Esq. Captain: A. Alcock. Hon. Sec. and Treasurer: M. E. Ball.

The Swimming Club, which is incorporated in the Clubs' Union, has for its headquarters the Southwark Baths, about five minutes' walk from the hospital; but the students are allowed to use the bath in the Nurses' Home on three days in the week, and on alternate Sundays. This affords excellent opportunities for practice both in racing and in water polo.

A good programme of matches is arranged during May and June, and there is an Inter-Hospital Water Polo Cup, for which the ties are played off in July. This year, after beating St. Batholomew's and St. Thomas's in the first and second rounds, we lost to London in the the final, after playing extra time.

There is also an Inter-Hospital contest in team racing, each hospital sending a team of four.

The General Meeting is held in March, and all freshmen who take an interest in swimming should be present.

The Pupils' Physical Society.—Hon. President: Sir Samuel Wilks, Bart., M.D., LL.D., F.R.S. Hon. Vice-Presidents: J. F. Goodhart, M.D., LL.D.; Sir Henry Howse, M.S.; P. H. Pye-Smith, M.D., F.R.S.; G. H. Savage, M.D. Hon. Secretaries: H. F. Bell-Walker, M.D.; W. M. Mollison, M.C., F.R.C.S.

This flourishing society was founded in 1830, on the plan of the old Physical Society, which existed during the latter part of the eighteenth century at Guy's Hospital.

At the Pupils' Physical Society, which meets each fortnight on Saturday evenings, a paper on some subject, not necessarily of medical interest, may be read by any member, to be followed by a discussion. "Clinical and Pathological Evenings" are devoted to the exhibition and discussion of interesting cases or specimens which may be shown by any member. Members are reminded that in connection with the Society the following prizes are offered for competition:—The Treasurer's Prize of £5 is given annually, and the subject of the Essay for the ensuing session is "An Essay on Pneumococcal Suppurations." The Society offers a prize of £10 for the best paper read during the session; a prize of £5 to the member who distinguishes himself most in the discussions; and a prize of £5 to the member who exhibits the best specimens of scientific interest during the session.

The Dental Society.—President: E. B. Dowsett, Esq., L.R.C.P., M.R.C.S., L.D.S. Hon. Secretary and Treasurer: R. J. Gibbings. Committee: N. H. V. Riches, H. T. Reeve, H. C. Visick, P. J. Proud, H. Daw.

The Society was founded in 1894, having for its object the reading and discussion of papers on dental subjects; also to enable students to bring before its members casual communications arising out of the practice in the hospital and from other sources. A prize (value £5) is awarded at the end of each session for the best paper read before the Society.

Meetings are held every month during the winter session in the Dental Lecture Room adjoining the Conservation Room. The next meeting will take place on October 19th, at 4 p.m., when it is hoped all new students will be present. Tea is provided in the basement of the dental buildings for members attending the meetings.

The Debating Society.—President: G. H. Savage, M.D., F.R.C.P. Vice-Presidents: J. Fawcett, M.D., E. I. Spriggs, M.D., A. W. Ormond, F.R.C.S., M. S. Pembrey, M.A., M.D., H. F. Bell-Walker, M.D. Hon. Secretaries: K. H. Digby, E. Martyn Lobb, and a Committee of six students.

The Society was formed fourteen years ago and was incorporated in the Clubs' Union two years after its foundation. It has always been one of the most popular of the constituent societies, the attendance at meetings frequently reaching three figures.

The debates afford a common ground of interest upon which junior and senior men can meet. There are six meetings during the session, including the Ladies' Night, which is held in February. These take place on Saturday evenings, and are arranged so as not to clash with the Physical Society's evenings. There is also an Annual Dinner. Full programmes of the fixtures will be obtainable early in October, and the debates are regularly advertised a full week in advance.

The Musical Society.—Under this heading are included three sections—the Nurses' Choral Society, the Students' Glee Club, and the Orchestral Society; and to one or both of the latter two sections all students who are musically inclined are advised to belong.

As a hospital society it is unique, for at no other hospital is there the opportunity (so kindly allowed us here by the Matron and Governors) of joining with the nursing staff in a musical way. And so the Musical

Society is enabled to perform works from which a purely male voice chorus would be necessarily debarred.

Though the Students' Glee Club is non-affiliated, no subscription is now required from its members, as was formerly the case, so that men need not fear to come on that score.

Two concerts are usually given each season, one early in December, the second just before Lent, and practices are held as follows:—Fridays, at 5 p.m., Students' Glee Club; at 8 p.m., Nurses' Choral Society; and combined choral practices alternately. Wednesdays, at 8 p.m., Orchestral Society.

All the practices are held in the Court Room (above the Counting-house), and last one hour. The music is provided by the society.

Owing to the difficulty of seeing men personally, the secretary asks that intending members should not wait to be invited to join the society, but should set apart the hours mentioned and come to the practices, where the respective conductors will be glad to meet them.

Particulars and Rules may be seen on the oak screens (opposite Astley-Cooper ward), or obtained from the secretary, F. A. Barker, or any member of the committee.

Present members and past members, who are still at the hospital, are asked to keep the times for rehearsals free as far as possible from other engagements, and come to the practices, remembering that a successful concert depends greatly on a regular attendance at practices, and on the best efforts of members to keep up the high standard of music which has been reached in the past.

THE CHRISTIAN UNION.—The Christian Union was started in 1849 by Dr. Habershon and Dr. Golding-Bird, who held meetings in their houses for students of Guy's and St. Thomas's Hospitals. Since that time similar institutions have been formed in all the London hospitals.

The Christian Union is now a part of the Student Christian Movement of Great Britain, which, again, is part of a world-wide brotherhood of Christian students, known as the World's Student Christian Federation. This movement was started in 1893, as an outgrowth of the Student Volunteer Missionary Union, which was formed in the previous year through the interest awakened by visits paid to several Universities and Colleges by Messrs. Stanley Smith and C. T. Studd, prior to their departure as missionaries to China, and also by the visits of Messrs. Forman and Wilder, who told of the growth of missionary enthusiasm in the colleges of America. At that time religious societies among students existed in only twenty British Colleges; to-day there are Christion Unions in 121 Colleges and Universities, with a membership of 4,500. The World's Student Christian Federation has a membership of over 103,000 in 40 different countries. Every year a summer camp conference is held at Conishead, with an attendance of about 600. During the Winter Term, conferences are held in London, and the last two years large gatherings of students have been held in the Mansion House and Guildhall. In connection with London Unive sity a missionary caravan has been touring during the summer vacation in Buckinghamshire, seeking to arouse interest in foreign missions.

The objects of the Christian Union are to lead students to become disciples of Jesus Christ, and to promote their spiritual life by regular meetings for prayer and Bible study.

The Missionary Society holds meetings every month.

During the Winter Term it has been arranged to hold a monthly meeting, at which an address will be given. Every week meetings will be held for conversational Bible study. Prayer meetings are held every day. The speakers and time of meeting will be announced later.

THE GUY'S HOSPITAL GAZETTE is published on alternate Saturdays, from the library of the hospital, where copies may be obtained by all members of the Clubs' Union and by immediate sudscribers.

The columns of the GAZETTE are open to contributions and correspondence from all sources, the writer's name being requisite as a guarantee of good faith, if not for publication. All contributions must be deposited in the Editor's box in the colonnade, or addressed to the Editor by post not later than Wednesday in each week of issue.

THE REPORTS.—Edited by F. J. Steward, M.S., and Herbert French, M.A., M.D.

The first volume of the Guy's Hospital Reports appeared in 1836. The Reports are published periodically, and contain contributions upon professional and scientific subjects from the Staff of the Hospital and Medical School.

THE STUDENTS' CLUB.—Committee till 1907 (March). President: P. H. Pye-Smith, M.D., F.R.S. Treasurer: John Fawcett, M.D. Hon. Secretary: A. W. Ormond, F.R.C.S. Hon. Assistant Secretary: E. I. Spriggs, M.D.; and a committee of eight.

The above-named manage the affairs of the Club, a full account of which will be found in the Clubs' Union Blue Book, p. 55.

Change of Address.

Dr. R. D. Attwood, from the Infirmary, East Dulwich Grove, London, S.E., to Barley, Royston, Herts.

Dr. W. R. Cazenove, from Beechurst, Long Sutton, Lincolnshire, to West Norwood Lodge, West Norwood, S.E.

Mr. T. Holmes, M.S., M.D., from Guy's Hospital to 22, Nightingale Road, Southsea, Hants.

Dr. H. T. Palmer, from Shiraz, Persia, to the Gold Coast, West Africa.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Death.

EVANS.—On 5th August, at Llandilo, Carmarthenshire, Richard David Evans, M.R.C.S. Eng., L.R.C.P. Lond., aged 42 years.

ED.—C. L. L

GUY'S HOSPITAL GAZETTE.

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Passim.

THE Session has opened well, if the number of new faces to be seen within our gates is any criterion of a good opening. We are not authorised to state anything about the actual figures—such things are Cabinet secrets, which no amount of entreaty or perseverance can wheedle out of the Medical School officials—but we understand that the medical entry has been a decidedly good one this year. The opening day, indeed, saw a solid phalanx of new men drawn up before the counter in the Medical School Office, behind which Mr. Croucher and his assistants were kept busy in handing out keys, papers, and information at a rate which would have pleased the most pessimistic of croakers. Nowadays, when even the lay press concerns itself so gravely about the alleged dearth of medical students that we are treated to scare heads anent a "Doctor's Famine," such an opening day must bring a vast amount of practical consolation to the School authorities.

THE new men will find everything ready for their reception. The dissecting and pickle rooms have been renovated, so that they are almost ideal from the workers' point of view. Nor has the College escaped its share of attention. The lavatory has been retiled, and new basins and a couple of new mirrors have been fitted up, while the towels, we are happy to state, seem to be changed pretty frequently. So we commence smoothly. Let us trust that such a good beginning is but the foretaste of greater things to come, and that there will be no need in the future for the "complaint book" which mysteriously disappeared from the reading room a few years ago.

ONCE more we draw attention to the fact that the opening meeting of the Pupils' Physical Society will be held on Saturday next, the 13th inst. It will be preceded by a dinner in the College Dining Hall, at 6.30, over which the Treasurer, Mr. Cosmo Bonsor, will preside. Tickets for the dinner (3/6) can be obtained from the Hon. Secretaries, Dr. Bell Walker and Mr. Mollison, from the Presidents, or from the Caterer, and as the dining accommodation is limited an early application is desirable. After the dinner an adjournment will be made to the Physiological Theatre, where Professor Clifford Allbutt, the guest of the evening, will read a paper on "Words and Things." Sir Samuel Wilks, the Honorary President of the Society and the doyen of the Consulting Staff, will be in the chair, and we cordially hope that every new man will turn up for the occasion. The opening night of the Society is an event of the commencement of the Session at Guy's which no new comer should miss. At the conclusion of the meeting those present will have an opportunity of inspecting the fine exhibition of instruments, books, and apparatus which is always provided by the various large firms, and which may be seen in the laboratory upstairs.

THOROUGHLY to appreciate a going-off dinner a man must be either going-off or coming-on as a Resident himself, and in most cases the appreciation is more or less tempered with regret. Like most of the goals of human ambition the "top-table" loses half its charm when it is reached, and the somewhat uproarious enthusiasm of "coming-on" emphasizes the hum-drum existence that so speedily ensues. Going-off must, in the nature of things, savour somewhat of a surgical operation, to say nothing of the fact that impenetrable obscurity will henceforth, for many years, enwrap one whom a great hospital has hitherto delighted to honour. In spite, however, of all these chastening reflections, Residents on these occasions are not given to brooding, and it has never been noticed that

their guests are afflicted with a deep sense of the seriousness of life.

The going-off dinner of the 29th of September was certainly an unqualified success. Considerable discretion was exercised by those responsible ones who arranged the menu and made choice of the vintages, whilst their selection of speakers, at any rate, could not have been improved upon. The musical programme also was more extensive than usual, and was much appreciated. Messrs. Charles Cameron and R. E. French, the late President and Vice-President, have given place to Messrs. Herbert Knight and Walter Reeve, who will fill their respective posts for a season wherein such posts are no sinecures. We cannot too highly compliment the Residents on the appropriateness of their choice.

The Cobham cat appears to have aroused some interest, a fact which is not surprising when one considers how genially Dr. Fisher introduced it to Gazette readers. The two letters which we publish in this issue both refer to a similar relic which used to be kept in the old museum. We have attempted to discover its present whereabouts, but have so far failed to exhume it from amongst the mass of cases and bottled specimens which found a resting-place in the comparative anatomy museum on the demolition of the old anatomical theatre. Nor have we been able to find out anything about its history. The other points raised by our correspondents are not without interest. We believe we are right in stating that the "Hole-in-the-Wall" in the Borough is not unknown to Guy's students, and that its museum of dried curiosities does contain a specimen of the cat tribe, though not with a rat in its mouth. The greater question, namely, the significance of such mummified cats and their association with churches, we leave to antiquarian readers to discuss. Possibly it would be found both instructive and amusing. Tradition, indeed, asserts that in the Middle Ages the cat certainly did possess some ecclesiastical importance, and there is still extant a curious old plate depicting the worship of the cat in a mediæval church on the feast of St. John,¶ together with an equally curious description of the cruelties practised on such stray felines as were caught within the sacred precincts on the eve of another high festival. Our correspondents' reference to cats in churches is probably correct, at least so far as Continental churches are concerned, and it would be interesting to know if there exists in this country any cat figures in the carving or sculpture of any of the older places of worship. Perhaps some reader may be able to throw light on the subject.

We are happy to record the fact that the Treasurer, upon the recommendation of the Dental School Staff, has made a new departure in the appointment of an Operating Demonstrator of Practical Dentistry. The appointment is unique in the School, the Staff Demonstrators having previously held probationary and revision classes, and the supervision of the making of dentures, in addition to practical teaching. The newly-appointed Demonstrator, Mr. H. Chapman, will devote his time solely to conservative dental operations upon patients, and will attend on three mornings of the week. Students will henceforth have the opportunity of closely watching at the chair-side the manipulations of an expert in Operative Dentistry, the demonstrations being intended to serve as "object lessons." It was thought by the Dental Council that the unavoidable intervals between the appointments with patients and also between the School Lectures could not be better employed by students than in witnessing how gold fillings, inlays, crowns, regulation cases and "bridges" can be well done. It is to be hoped that students will take advantage of the additional practical instruction thus afforded.

Dr. Osler's communication to his students on the advisability of studying French and German deserves wider attention than it has so far received. The Regius Professor of Medicine earnestly advocates the study of one or both of these languages, and advises his pupils to read both lay and scientific journals in French and German. He has drawn up an admirable list of books which will be of service to the student who desires to improve his knowledge of these two useful adjuncts, and a copy of it appears in a recent issue of the *Lancet*. It is surprising how few of us go out of our way to acquire a working knowledge of any other language besides our own, and if one peruses current medical literature one realises with a shock how few writers have troubled themselves even to get thoroughly proficient in that. The study of a foreign language is a great help towards knowing one's own, and medical students especially will find it of the utmost service to be conversant with either French or German. It is true excellent résumés of current medical literature are to be found in the *B.M.J.*, but second-hand information like that is rarely

so satisfactory as the articles read in the original.

Nor is it a very difficult matter in these days to acquire a reading knowledge of the two languages for which Dr. Osler pleads. There are cheap and good schools in various parts of London, and in our own library there are several foreign periodicals which will serve as text-books. Even a slight knowledge of French or German the medical student will find a great advantage. Week-end trips to the Continent—a little luxury which can be made as profitable as it is pleasant—can be indulged in at comparatively small expense, and although the student will find that he can visit and inspect most French or German hospitals with only English to help him, he will easily see that some knowledge of these languages will stand him in good stead in following the lectures or demonstrations which he may happen to attend while on his trip. Few of us, indeed, take advantage of the many opportunities of becoming acquainted with the working of foreign hospitals, and yet some of them are so easy of access. Perhaps it is because few of us know the facilities for such inspection, but in a great measure it is because the average student feels himself out of touch in a place where the patients complain of their symptoms, and the demonstrator points out the signs, in a language that is less familiar to him than Greek or Latin.

We are profoundly grateful to our correspondent, "Glaucopis," whose letter appears in this issue, for both his criticism and his suggestions. As a former "Passim-pusher," as he elegantly phrases it, he will appreciate the difficulties with which we have to cope in obtaining those illuminating and instructive accounts of the work in the various departments. The suggestion which he throws out, however, is a good one, and we sincerely hope that the several labourers in the field will be sufficiently stimulated by his appeal to favour the Gazette with an occasional paper on their discoveries. We are not so impertinent as to demand the cream; there is high authority in support of the statement that desiccated skim-milk is almost equally nutritious and much easier to obtain. So we plead for the latter. With regard to hospital news, which our correspondent complains we do not do justice to, we can only state that it is impossible for the most indefatigable and energetic of Passimists to be up to date in everything that goes on in our little world. On several occasions we have referred to the constructive alterations in the wards or in the college, and we shall always be grateful to anyone who will draw our attention to whatever topic of current hospital discussion may be thought worthy of consideration in "Passim."

If there is any truth in La Rochefoucauld's dictum that "We always take a sneaking pleasure in the troubles of our friends," the current issue of the "Broadway" should make pleasant reading for the externs. For it appears that their colleagues at the Westminster Hospital have grievances also. In fact, our contemporary goes so far as to liken their lot to that of the denizens of purgatory. "Hitherto," it remarks, speaking of the Westminster "Midder-Clerk," "his dull existence has been brightened by his privilege of dining with the Residents. The latter gentlemen have been only too pleased to extend to him all the hospitality possible. The House Committee, however, have at length perceived in this a subject for in-hospitable reform. For, in the absence of many of the Staff—also, we understand, in the face of strong protest on the part of the obstetric physician—the secretary succeeded in passing a motion to the effect that the midwifery clerk should no longer be entitled to dine with the Residents." Our contemporary goes on to give an account of the interview between the R.O.A. and the aforesaid secretary, which appears to have ended in a complete cessation of diplomatic courtesies between these two gentlemen. So it hints that there are other places where the Westminster student may learn his midder, should the secretary persist in his "contemptible action;" other institutions where the externs have free rooms, free board, and a life which is luxury compared to the bitter régime that prevails at Dean's Yard. We offer our condolences and sympathies to the men of Westminster. They, at least, know how to express their feelings strongly, and there is some truth in Toussaint L'Ouverture's remark that the man who can stand up to Napoleon deserves to get what he wants.

We are asked to draw attention to the fact that the private library of the late Dr. J. H. Bryant has been handed over to Mr. Grattan, of the Borough High Street, for disposal out of hand. The list of books may be seen on application to Mr. Grattan, as it is not intended to issue a printed catalogue. The library is a particularly good one, containing a variety of useful and valuable works, chiefly on medical subjects, and is well worth inspection.

In Praise of the Master.

It is only natural that when a great teacher retires from his post his pupils should combine to honour him. Here we have our own notions as to the proper way of paying our respects; on the Continent they have a custom which has the sanction of centuries behind it, and which is, in its way, a fine custom They issue a Festschrift.

Of late years there have been many such Festschriften—some of them compiled after the master's death, others on the anniversary of his promotion to the professorial chair; others, again, in celebration of some striking event in his career. The jubilee of the veteran layman who invented one of the most useful clinical instruments, the laryngoscope, is a case in point, and the tributes, emanating from all quarters and culminating in the combined congratulations of the whole medical profession, which were paid him, constituted one of the most remarkable of uncollated festival volumes ever compiled. There is historic precedent for the Festschrift. Galen wrote appreciations of his teachers, Ennius Meccius, the pharmacologist, Albinus, the anatomical academician, and the empiric Æschrion, while he was yet an unfledged student. The revival of the custom in modern times has much in its favour. What better tribute of respect from a pupil to the master than the completion by the former of a work which the latter's support and teaching had initiated and helped to bring to perfection? That, indeed, is the motive that underlies the Festschrift. Primarily it is in the master's praise; secondarily, and only incidentally, it is to prove the scholar's proficiency in what he has learned. Outsiders may find the system a trifle one-sided, but—they are outsiders. Those who know the person praised, and the men who combine to praise him, will know how high is the appreciation that prompts a prosy scientist to bring forward the best of his efforts as a trifle towards the bunch which is to be laid before the master on his retirement, or on his coffin at his death.

Now, in the natural course of time, it has come to the turn of Olof Hammersten, Professor at the Royal University of Upsala, and the greatest living authority on the science of Physiological Chemistry, to relinquish the chair which he has so long and honourably occupied. "Qua propter nonnulli tui collegæ et pristini discipuli varia opuscula, tam chemiam medicinalem spectantia quam et plus minus cognata, in modestum hoc volumen collecta tradere optaverunt, . . . ad celebrandum, pro modulo cujusque virium, festum jubilare."

They have commenced with a preface in which their collective admiration of the master is expressed in a choice Latinity which is refreshing to read in these degenerate days when that language is no longer the volapuk of science. "Stes illustre scientiæ decus, stes per multa lustra incolumis—carus, reverendus, salutifer." But they have not stopped at compliments. They have attempted to show that his teachings and precepts have weighed with them, and have given the master the finest leaf in his crown by acknowledging his influence and his aid in work which is worthy to stand beside his own. The Editors of the Festsckrift, M. M. Morner, Schmidt-Nielsen, and Zachrisson, have drawn up a careful and instructive bibliography of the master's work—a closely-printed list of twenty-two pages. This catalogue in itself would be a monument to the memory of the man. In 1866 Hammarsten started his career as original investigator by publishing in the Upsala laekareforaenings Foerhandlingar, a paper on the embryology of the red corpuscles, following it up, a few months later, by a thoughtful and painstakingly written article on the action of the digestive ferments on egg albumins. Since then he has allowed no year to pass without some contribution from his pen, some original note from his laboratory, to appear in the professional journals of his city. He rarely went outside Upsala. In all that extensive catalogue one finds few notices of foreign contributions. There are a few: his prefaces to the English, German, and Italian editions of his now justly celebrated "Text-book of Physiological Chemistry," a few papers in that cosmopolitan organ, Hoppe-Zeyler's Zeitschrift, and an occasional résumé of recent work on the blood, bile, or intestinal ferments for one or other of the larger Systems of Medicine—these are almost all that he has done outside the semi-official publications of the Upsala Philosophical Transactions. One of his most thoughtful and original articles was the fine exposition of the work which had been done by Scandinavian writers in chemical physiology, which he contributed, more than thirty years ago, to Maly's Jahresbericht—an exposition which is worth close study. His most recent work has been both special and general, including an article on the chemistry of bile (Ergebnisse d. Physiologie, 1905), and a lengthy critique of the work which has been done in investigating the chemical composition of fish ova.

The rest of the Festskrift is made up of original articles, all showing evidence of special research and original thought, and each of them a worthy tribute of respect to the master in whose honour they have been compiled. As is to be expected, however, they vary in their importance and in their interest to the general reader, if one may be allowed to speak of a general reader in connection with a work that is so highly specialised. Every country almost has furnished its tribute. Upsala takes the place of honour with a long paper on the influence of the physiological products of metabolism on the isolated mammalian heart. In this article Dr. Backman, of Hammarsten's own laboratory, gives the results of a prolonged series of experiments relative to the action of solutions of urea, carbonate of soda, uric acid, xanthine, creatine, and other substances on the exposed heart. The sum total of these results lead him to suppose that the influence exerted by these substances upon the heart, in increasing the amplitude of its contractions, or totally stopping its movements, depends on several factors, and he concludes by expressing the opinion that some at least of these effects are due to the fact that the substances are ultimate sources of energy to the organism. Dr. Ivor Bang, of the University of Lund, contributes a practical article on the centrifuge in quantitative analyses. He points out how little this instrument is used in such processes, and pleads for its greater employment in all experiments that involve prolonged filtration, or difficult separation, such as, for instance, Abeles' method of estimating the amount of sugar in blood. America gives a paper from the pen of Dr. Folin, of the MacLean Hospital Laboratory, dealing with the biochemistry of creatin and creatinin, in which the author tentatively puts forward the view that creatin is a food and not a waste product, finding support for his contention in the fact that it is retained when fed together with a nitrogen-poor diet, and that it therefore differs from an ordinary amido-acid whose nitrogen would be excreted as urea. Herr Geelmuyder, of the University of Christiana, describes a new method of quantitatively estimating beta oxybutyric acid by preliminary extraction with ether and subsequent polarimetry—a paper of little interest to the clinician, since the method is complicated and difficult. Dr. Hasselbalch, who is attached to the Finsen Institute at Copenhagen, supplies an interesting and readable article on the action of actinic light on oxygen combinations in the blood. From the Lister Institute of Preventive Medicine comes a highly specialised paper on the influence of acid and alkali on the autolysis of organs. The clinical laboratory of the largest hospital in Stockholm contributes two papers, one on the metabolism of albumins, and the other on the presence of iodine in human thyroids. Dr. Laitinen, of the old school of Helsinfors, writes on the various methods of estimating the total alkalinity of the blood. The article, however, that will more directly appeal to medical men is that in which Dr. Oerum, of Copenhagen, reviews the several methods of estimating the amount of hæmoglobin in the blood, and discusses their respective values from a bed-side standpoint. While admitting that his data are not absolutely complete, he thinks there is sufficient reason to hold that the present methods—each and all of which he describes in detail—give contradictory and uncertain results. Thus in anæmic patients the methods of Gowers, Tallquist, Fleischl-Miesher, and Haldane, do not give results corresponding to those obtained by using the Sahli method. He thinks that these different results may be explained by assuming that there are various changeable modifications in the percentage amount of the colouring matter which cannot be accurately measured by present methods. Dr. Poulsson contributes a paper strongly advocating the use of Cetraria bread (Iceland Moss) in diabetes, and tables cases in which the percentage of sugar diminished rapidly while the patients improved in a marked degree on this diet. Incidentally he gives a résumé of the various opinions with regard to the advisability of allowing the patient to take carbohydrate food in this disease. Other papers are of more specially chemico-physiological interest, with the exception of one on Vibrio metschnikoffii, and a study on the action of stovaine and cocaine on peripheral nerve endings. An interesting contribution is that of Dr. Zeidlitz, who points out that Almens' method of estimating sugar in the urine (better known here as Nyland's reaction, or the bismuth test) is unreliable in cases of syphilitic patients who have been treated with mercury. The bismuth test is not one often used here, and the error which the author describes does not appear to be of clinical importance, but the observation is interesting from a purely physiological point of view.

Such, then, is the collective tribute which his pupils have dedicated to Olof Hammarsten. As a contribution to the science to which he has devoted his life, it is no mean achievement. As a mark of personal appreciation it is, perhaps, the best token they could have given him of

their gratitude for his help when they were workers under him.

"Festskrift tillegnad Olof Hammarsten." Upsala. Akademiska Bokhandeln, Aug. 21st, 1906. 8vo.

Notices.

GUY'S HOSPITAL MEDICAL SCHOOL.

The following Entrance Scholarships and Certificates have been awarded:—

Senior Science Scholarship for University Students.—£50: A. H. Crook, B.A., Christ's College, Cambridge. Certificate: C. C. Holman, B.A., Caius College, Cambridge.

Junior Science Scholarships.—£150: F. Cook, Preliminary Scientific (M.B.) Class, Guy's Hospital. £60: E. G. Schlesinger, Preliminary Scientific (M.B.) Class, Guy's Hospital. Certificate: G. Troughton Smith, Alleyn's School, Dulwich.

Entrance Scholarships in Arts.—£100: W. A. Young, Colfe Grammar School, Lewisham. £50: H. Webb. Rossall School. Certificate: N. E. Farr, St. Paul's School.

GUY'S HOSPITAL DENTAL SCHOOL.

Entrance Scholarship in Dental Mechanics.—The above Scholarship has been awarded to Mr. E. A. Tomes.

An examination of candidates for entry into the Medical Department of the Royal Navy will be held on the 12th November, 1906, and following days, at the Examination Hall, Thames Embankment. Not more than six commissions will be offered. The forms to be filled up by candidates will be supplied on application to the Medical Director-General, Admiralty, 18, Victoria Street, S.W.

Papers by Guy's Men.

The Toxæmia of Pregnancy. By F. C. Batchelor, M.D. Durh.—*New Zealand Medical Journal* for July and August, 1906.

Uber Filtration durch tierische Membranen und den Salzgehalt des Blutes, verglichen mit dem anderer seröser Flüssigkeiten. Illustrated. By Arthur F. Hertz, M.B. Oxon., M.R.C.P. Lond.—*Hoppe-Seyler's Zeitschrift für Physiologische Chemie*, Band xlviii., Heft 3 und 4, 1906.

The Diagnosis and Treatment of Ringworm. By G. Norman Meachen, M.D., B.S. Lond., M.R.C.P. Lond. and Ed.—*The Medical Press and Circular*, September 5th, 1906.

Guy's Re-visited.

Long years ago,—it must be nearly five,
I walked this ancient hospital of Guy's;
Aye, walked it; many a foul wet winter's night,
Stamped out through mud, beyond the farthest bound,
And doubling back by many a tortuous street,
By Neckinger and lonely Sparrick's Row,
To find another card, "The bearer waits
To bring the doctor back to far Blackfriars."
I walked the Boro', knew its every turn,
I wooed it, won its secrets cunningly,
And then it turned and tried to strike me dead,
Thinking I might its nakedness reveal.
(This striking simile, I own, is filched,
From whence I know not, but my thanks to him
Whose thought it was.) I walked the hospital,
And climbed, with aching feet, those dreadful stairs
That lead to Queen, because the accursed lift
Was half-way up, and, like the Duke of York,
Being half-way up, was neither up nor down.
Ah, many a bitter curse it caused, that lift!
And then I walked to meet the well-armed band
That guard the portals which we all must pass,
And passing them I came away from Guy's.

And now, come back, all things seem strangely changed.
Gone are those landmarks that I used to know!
The Dean no longer sits in fearsome gloom;
The Park is fashioned on a better plan;
The nurses rest against a portico
Whose columns rest where stood the old museum,
And Mr. Betts presided, levying pence
To feed his pigeons in the days long past.

* * * *

I know the place is going to the dogs,
No place that ever was but went there, too,
After a lengthy absence; doubtless, once
Our fathers thought the same, and theirs before
Knew that it went that way, and yet the dogs
Seem far away, unkennelled and unbred.

Surely the loungers in the Colonnade
Wait much as we did for the Staff to come,
Supported by the same eternal hope.
I do not know my way about; my friends
Are gone, some married, others on the Staff,
Some both, and some too puffed up now to greet
A poor G. P. that wears a bowler hat.
The place is changed, I know it. I believe
It's merely washed its face and brushed its hair,
And having thrust one brood out on the world,
Brings forth another brood to take its place.

Ah, times are changed. I hear another lift
Will soon convey the wearied man to Queen,
That men may walk the wards without reproach.

AN OLD GUY'S MAN.

Radical Cure of Inguinal Hernia in Children.

CLINICAL LECTURE BY C. H. FAGGE, F.R.C.S.
June, 1906.

Gentlemen,—There are now in my beds, in Lazarus ward, two little boys who suffered from inguinal hernia, for which the operation of radical cure has been performed; and as the question of operation for inguinal hernia in children is one of recent development, I thought it would be worth while to discuss the indications for its performance.

At the British Medical Association meeting in 1899, Mr. Langton, Surgeon to St. Bartholomew's Hospital, said that "no operation should be advised, except under pressing conditions, prior to five or six years of age." He said the muscles and other structures in the inguinal region were so soft, and the inguinal canal was so short, the external and internal abdominal rings so near to one another—the external being directly in front of the internal—that the "radical cure" of hernia in a child can in no sense be radical. The only person who then ventured an opposite opinion—I am almost proud to say—was Mr. Eve, who was one of the surgeons at the Evelina Hospital. He recorded twenty-nine radical cures in children, and indicated that in his opinion operation should be undertaken in all cases where treatment by trusses proved unsatisfactory. Two years later, in 1901, Mr. Stiles, of Edinburgh, read a paper before the British Medical Association on a series of over one hundred radical cures in children. Yet several surgeons in the ensuing discussion showed that in their view the indications for operation did not include simple cases. More recently still the operation has spread very widely, and much attention has been drawn to the subject by Hamilton Russell's contention (*Lancet*, 1899, 1901 and 1904), from observations at his operations, that every case of inguinal hernia is due to an abnormality of development.

The first case I wish to speak of is that of a boy aged five years, with a swelling in the right inguinal region. The clerk says, in his report, he is admitted for "A swelling in the right inguinal region?" This is a sufficient indication that when the boy was first seen the swelling was not there. The boy had an inguinal swelling which had been diagnosed as a hernia since the earliest weeks of his life, and for four years had worn a truss. I do not know of what description the first truss was, but for three years he has worn an ordinary spring truss, with a rubber covering. Three weeks before he came in his hernia had been down. The only other peculiar feature about him was, that the right testicle could be reduced into the abdomen. It ordinarily lay in the scrotum in almost the natural position; but it could be easily pushed back along the inguinal canal into the abdomen. He was taken to the theatre and anæsthetised, and an incision was made, three inches in length, over the right inguinal canal, extending below to the centre of the external abdominal ring. The external oblique aponeurosis and the cremasteric and infundibuliform fasciæ were cut through, and the hernial sac was found and carefully defined. This sac was found to be of the "congenital" type, *i.e.*, the processus vaginalis had persisted throughout, and the bowel lay in the same sac which formed the covering for the testis. The sac was separated from the cord as far as the internal ring, and the vas carefully located. Having traced the sac up to the internal abdominal ring, a Staffordshire knot was tied around its neck and the sac below this was removed. A single catgut stitch, passing underneath the cord, drew the conjoint tendon down to Poupart's ligament, so as to diminish the aperture under the arching fibres of the conjoint tendon. The external oblique aponeurosis was sewn up so that the external abdominal ring was made small, and the superficial fascia having been sutured, the wound was closed and a gauze dressing applied.

The other patient is aged five, and the history is quite short. A few weeks ago the mother noticed a swelling in the left inguinal region, and took him to her doctor, who advised operation. The report says there is a hard lump in the left inguinal region the size of a cherry, and it can be freely moved in an upward direction and can be made to disappear through the internal abdominal ring. There is no impulse on coughing. When this lump has disappeared there is no testicle in the left side of the scrotum. Undescended left testicle was diagnosed. A week later the notes say that the patient has been kept in the hospital, and has been made to get up daily and run about to see if any swelling would come down in addition to the hard lump. I was not at all satisfied that in a child of five there was any immediate indication to operate on an undescended testicle, assuming there was no hernia. Nine days later no additional swelling had been seen to come down, but the

mother gave a definite history of a swelling which, she assured us, was as large as a tennis ball. As it then seemed clear that a hernia of some size was present, in addition to an undescended testis, an operation was decided upon. An incision was made over the left inguinal canal, two and a-half inches long, the aponeurosis of the external oblique and the coverings of the cord were divided, and the testis defined. A small hernial sac was found, which again proved to be of the congenital variety. The sac was carefully separated, and here especial care was necessary to protect the vas. The sac was ligatured round the neck and removed, the cut end being pushed back through the internal ring. A stitch, passing under the cord, was put through the conjoint tendon, drawing it down to Poupart's ligament. The testis was drawn down into the scrotum, and the scrotal skin being invaginated, was sewn to the lower extremity of the testis with catgut. The external oblique was sutured up, and the skin was secured by a continuous suture, a gauze dressing applied, and the patient returned to bed.

Since April, 1900, I have operated on fifty-seven cases, in the Evelina Hospital, of inguinal hernia in children. Most of these operations have been done in the last two and a-half years. Four of these were irreducible, and I think you will agree that in such cases the lines of treatment are clear. The other fifty-three were reducible. These figures suggest the comparative rarity of irreducible or strangulated hernia in children. Even then, the notes tell us that in two of them reduction was brought about before they were operated upon. They were put into bed, their legs suspended, an ice bag was put on, and the hernia went back. Because they had had an irreducible hernia which was, or threatened to become, strangulated, they were operated upon that or the next day, and a radical cure was carried out. Ten were bilateral, ten were on the left side, thirty-three on the right. There were three females, fifty-four males. In six of them the testis was undescended or misplaced. In regard to results, two out of the fifty-seven suppurated superficially, but this did not seem either to prolong their stay in hospital or to affect the ultimate result. They were the second and the thirty-ninth of the series. One child died of measles several weeks after its discharge from the hospital. I have seen most of the other fifty-six cases several times in the last two years, and I have not seen a recurrence. I think about forty of them have been seen more than one year after the operation, and it is generally held that if a hernia recurs after a radical cure this will always happen during the first year, and probably in the first six months after the operation. Of those fifty-seven cases, seventeen were under one year, and the youngest only a month old.

Having read notes on two cases now in the wards, I propose now to discuss the subject on general lines. What are the ætiological factors of inguinal hernia in children? On the one hand Hamilton Russell, of Melbourne, says the only ætiological factor is the processus vaginalis. Others, such as Corner, of St. Thomas's, believe in gastro-enteritis, flatulence, rickets and phimosis as predisposing causes. You may think there is nothing of practical value in all this, and that it is all arguing about a trifle. But there is something in it, as I shall try to point out later. You know that the processus vaginalis precedes the descending testicle, and Sachs found that in 59 per cent. of the bodies of children he examined the processus vaginalis was incompletely closed at four months after birth. So you will agree that the processus vaginalis may not normally close until some time after birth, and is therefore an efficient predisposing cause for the descent of a hernia. There is no doubt, too, that the processus vaginalis persists later, and more frequently on the right than on the left side. You will remember the majority of my hernias were on the right side, and others have noticed the same thing. I do not think gastro-enteritis, flatulence and rickets—conditions which would increase the normal intra-abdominal pressure—have much, if anything, to do with the causation. This view is supported by the fact that in children suffering from gastro-enteritis, flatulence, etc., that is, abnormal intestinal digestion, you do not find any great tendency towards the occurrence of femoral hernia. Now, as Hamilton Russell points out, the femoral opening is far weaker, naturally, than the inguinal canal. The femoral canal is straight, and is directly acted upon by any increased intra-abdominal tension; it has no muscular surroundings at all; whereas the inguinal canal is certainly not more exposed to intra-abdominal pressure, but has an oblique valve-like direction, and is surrounded by fairly strong muscles, of which the conjoint tendon is the most important. Though I have operated upon fifty-seven inguinal herniæ in children, I have only operated upon one femoral hernia, suggesting—and it is true in the experience of others also—that femoral hernia is much less common in children. In spite of the argument I have used, we must remember that gastro-enteritis, flatulence and rickets may possibly be —some say certainly are—important factors,

and must therefore be paid attention to and treated.

The last-named factor is phimosis, but I cannot believe that phimosis has anything to do with the formation of hernia. The prepuce in a child with a hernia may be very long, but, as a rule, micturition is easy, and you do not find the prepuce ballooned when water is passed. Now, however narrow and long the prepuce is, there can be no marked urinary obstruction if the prepuce does not balloon; and there can be no necessity for straining, which aids the descent of a rupture. Again, operation for the removal of phimosis, namely, circumcision, has, in practice, no effect upon the hernia. It is a very excellent thing, on the grounds of cleanliness, to advise that a child with a long foreskin should be circumcised, provided you do not deceive yourself or your patient with the idea that if you cure the phimosis the hernia will get better. I have frequently seen children —both at the Evelina Hospital and here—who have been operated upon for phimosis three or four years previously, but whose herniæ have persisted.

What shall we say about the value of trusses? Eccles (Hernia, 1900) says that radical cure should only be undertaken "in boys with congenital hernia who have worn a steel spring truss night and day for at least three years." It is generally agreed that the common woollen truss is useless; the one which you usually see applied at Out-patients exerts no pressure on the inguinal canal. And there seems to be a growing opinion that though the wearing of a rubber truss in a child may prevent the hernia coming down, and therefore prevent all the evils of strangulation, its cure will result in only a very small percentage of cases. No doubt the presence of a truss prevents the neck—or that portion of the sac on which it presses—being distended by bowel or omentum, but that its use produces any change such as will result in the closure of the sac is very doubtful indeed.

I can only remember one child in whom the hernia no longer came down after wearing a truss. I have purposely avoided the phrase "cured after wearing a truss," though in this case, after watching the child for three years while the truss was worn, there was no sign of the hernia. I cannot convince myself that the mere fact of wearing a pad over the inguinal canal can cause the processus vaginalis—assuming it to be present—to close. There is no doubt that a truss will do much to keep a child of the leisured class comfortable and free from danger during the first few years of its life; but I think one should preserve quite an open mind as to whether such a hernial sac is ever obliterated, and whether such a hernia is cured by a truss. Coley collected 15,000 cases of hernia in adults, and found that 5,000 of these patients had been treated in infancy for ruptures on the same side.

It must have been your experience in the wards to find that the surgical ward clerk in his report on a case of inguinal hernia in an adult often says, "The patient suffered from hernia as a child," and no doubt wore a truss. The truss for a time prevented the neck of the sac being distended, and it was all right until the patient began to work; but by that time he had certainly ceased to wear his truss, and some sudden exertion brought down the rupture again through the still patent processus vaginalis.

In the notes of the two cases with which I began my lecture, the hernial sac was described as being in each case of the "congenital" type, by which is meant that the fœtal processus vaginalis had persisted throughout its whole extent, and the bowel had descended into it, and lay, therefore, in the same peritoneal sac which covered the testis (congenital vaginal hernia). But in the majority of herniæ in children this is not so, for in at least three-fourths of my fifty-seven operations the hernial sac ended above, and was entirely separate from the tunica vaginalis.

Now two explanations will fit in with this condition: (1) that the processus vaginalis has been obliterated in the normal manner from the upper limit of the testis to the internal abdominal ring, and the tunica vaginalis has been formed below by its persistence around the testis, after which a new peritoneal process has been pushed down along the inguinal canal into which the hernia has descended (acquired inguinal hernia); or (2) that the processus vaginalis has been obliterated only for a short distance above the testis, its lower end persisting to form the tunica vaginalis, while its upper end remains patent and connected with the peritoneal cavity, forming the hernial sac (congenital funicular hernia). This form Hamilton Russell describes as a partial hernia, the congenital vaginal hernia being, in his view, complete, yet both varieties of the "congenital" type. Stiles (*B. M. J.*, 1901), and others who agree with him, hold that the second explanation of the mode of formation of these hernial sacs is the correct one, and that all inguinal herniæ in children or even in adults are congenital, that is, are primarily due to persistence of an embryonic condition.

The chief argument which he uses in favour of this view is that if the sac is removed and

its neck ligatured recurrence does not take place; for he argues the only predisposing factor is the persistent fœtal sac, remove this and the patient is cured; but if the herniæ were acquired, and bowel with a new hernial sac passed down through the inguinal canal, because its walls were weakened by straining, then simple ligature of the sac would not suffice unless the weakened relaxed muscles of the inguinal canal were also dealt with. So we are now in a position to see why it was important to get a clear idea of the ætiological factors in hernia, and why we must discuss its anatomy, for the main lines of operative treatment depend upon our answers to these questions.

We now come naturally to the question of operative treatment. I have quoted Eccles to you, who said that "operative treatment should only be undertaken in boys when the sac is of the congenital type and a rubber truss has been worn night and day for at least three years" Of course, there is no doubt that most hospital patients will not, or cannot, carry out such tedious treatment.

The indications for the radical cure in children seem to me to be the following:—(1) A large scrotal hernia. I was satisfied to operate upon the second case now in the ward, of which I read you the notes, when the mother assured me there had been a swelling in the groin the size of a tennis ball. For such a hernia must mean considerable stretching of the inguinal canal, and natural cure is therefore improbable. (2) Again, double inguinal hernia necessitates a radical cure. (3) One or more attacks of irreducibility. One frequently sees small children brought up to the hospital with irreducible inguinal hernia, and when the child is taken in and given an anæsthetic, the hernia goes back. I have known this occur three times in one week to the same child, and when we consider the risk which the patient will run if strangulation takes place, I think it is true that one or more attacks of irreducibility are a very urgent argument in favour of radical cure in a child, however young. (4) The association of an inguinal hernia with an undescended testis is the strongest argument in favour of a radical cure. In these cases the sac is of the so-called "congenital vaginal" type.

How can you diagnose this variety of sac? Though sometimes it is extremely difficult, yet in the "funicular" or so-called acquired type in children the bowel is nearly always above and easily separable from the testicle, whereas in the "congenital vaginal hernia" the testicle is more or less difficult to discover, lying behind and often obscured by bowel. For here the sac lies in front of and on either side of the testicle, and it is easy for bowel lying in that sac to lie also in front of and on either side of the testicle. Again, the presence of an undescended testis confirms the suspicion that the hernia is of this variety.

Mr. Eve's indication for operating upon hernia in children, as he stated at the British Medical Association, 1899, was "agreement on the part of the mother to operation after she has had the alternative of prolonged wearing of trusses explained to her." And I really think that is the only practical indication for radical cure in children. I hope that your views as to the desirability of radical cure in children will be so wide that you will under all circumstances put before the patients or their parents the possibility of curing by operation in a fortnight what will otherwise mean the wearing of a truss for, according to Eccles, at least three years. Still, if you wish to summarise the cases suitable for radical cure, they will be children with large or double hernia; patients who have had one or more attacks of irreducibility, those in which the sac is of the congenital variety and associated with undescended testicle.

Corner says the ideal age at which to operate is four years, reasoning, I suppose, that by this age trusses will have succeeded or failed. None of mine have recurred, as I have said, although mine is not a large series. I have looked at the statistics of others, and I do not think that age makes the slightest difference, either with regard to the possibility of suppuration by contamination of the wound, nor with regard to recurrence. Neither of my cases which suppurated was under a year old, nor was the child who died of measles some weeks after the operation. In the seventeen under one year old, the results, both immediate and ultimate, were uniformly satisfactory.

Next let us consider the contents of hernial sacs in children. In the majority of them it is small intestine, within five feet of the ileo-cæcal valve, and on the right side one often finds the cæcum, and with it the appendix. I believe I have seen the cæcum in right inguinal hernia fifteen times. and as there were forty-three right-sided cases, I imagine that about one-third of herniæ on the right side include the appendix. Is the appendix in a hernial sac to be removed? Some always do so, but to me it seems unnecessary.

On the left side very frequently large intestine is found in the sac, usually that portion called

the iliac colon, just as it is about to pass over the left psoas muscle.

Just as in the male the testis may lie within the hernial sac, so in the female child the ovary is sometimes found. Two of my cases had ovary prolapsed into the sac, and as there were only three females this is probably an unusually large proportion.

The presence of the cæcum in large herniæ on the right side has already been referred to. Sometimes you find a portion of the internal ring is formed by the cæcum which has got no peritoneum behind it, but has slipped or been dragged down through the internal ring. It is always well to pass a finger through the internal ring before sewing it up, to see that the cæcum is not near the orifice. If the cæcum were to come down to the margin of the ring, and you were to ligature the ring up, you might pass your ligature through the cæcum and do much damage. Similarly, I have three or four times found the bladder may be drawn down into the neck of the sac, usually extra-peritoneally, and must be always thought of.

In performing a radical cure, one of the chief things to avoid is sepsis. Rubber gloves should be worn; and when two people are leaning over the patient close together, it is always advisable to wear a cap.

There are only a few points I need mention about the operation. The radical cure of inguinal hernia in the adult is a comparatively easy operation, but in a child it may be very difficult. The first reason is that the sac is usually very thin and tears easily, so that in separating it up to the level of the internal ring it may be torn in several places, and it is very difficult to satisfctorily put a ligature round it. Again, when the sac is of the congenital variety, you find that the separation of the vas from the sac is troublesome, for on the inner surface of the sac you find a definite ridge (plica vascularis), and lying in this (invaginating the peritoneum) is the vas surrounded by the vessels. With the finger inserted into the sac, as into the finger of a glove, the sac alone must be separated from the cord and its coverings, and when this is done the vas is easily defined and protected.

In all the cases I have quoted the external oblique aponeurosis was freely divided to expose the internal abdominal ring. Some operators think the parts are sufficiently exposed through the external abdominal ring. In both the cases of which I read the notes Bassini's operation was done: that is, having cut off and ligatured the sac, the conjoint tendon was sewn down to Poupart's ligament, and then the external oblique and the skin were sutured. Hamilton Russell's contention about the ætiology of inguinal hernia in children depends entirely upon this one point, that if the sac is obliterated the hernia is cured, no matter what else is done. And he says that clinical experience, based upon over one hundred cases, tells him that it is unnecessary to sew the conjoint tendon down, or to attempt to strengthen the abdominal wall in any way, so he simply makes an incision over the inguinal canal, not interfering with the external oblique aponeurosis. He exposes the sac as far as the internal ring, which, without opening up the external oblique, must sometimes be a little difficult, and the sac is ligatured and the wound sewn up.

We must decide the question what is to be done with an undescended testis, if present, in a congenital hernia. You can treat your undescended testis by replacing it in the abdomen, by sewing it down to the scrotum, or by removing it. Sentiment is against the last proceeding, but as its functional value is very slight, there is much to be said in favour of it. If you read Mr. G. B. Smith's paper (Guy's Hosp. Repts., vol. 53) on "The value of the undescended testis," and three lectures delivered by McAdam Eccles at the College of Surgeons about 1902, you will conclude that a testis which remains undescended, or incompletely descended until after puberty, is useless. Also a testis which comes down during late childhood is probably useless. As a general principle, it is true that the testis does not descend because it is not developed; and the converse is untrue, that it does not develop because it has not descended. In none of the sections of undescended testes I cut as Surgical Registrar were those changes found which may be included under the word "spermatogenesis."

If the testis is probably useless from the point of view of reproduction, there is only one other question which can influence you, and that is in respect to internal secretion. There is no evidence that internal secretion is not as good from one testicle as from two. So, one testis being descended, there is no strong argument against removing the other which is undescended if it cannot be easily brought into the scrotum. I hesitated to operate in my second case until I obtained the mother's permission to remove the testis, if necessary, because I foresaw being compelled to do it in the course of the operation. In one case of double undescended testes, I put them both back into the abdomen. It is said that malignant disease of the testis is more common in undescended testes, and that gonorrhœal epididymitis might be dangerous. I cannot tell

you what weight ought to be attached to these statements. When the testis is sewn down into the scrotum it sometimes happens that the testicle will only lie high in the scrotum which is invaginated and drawn up by the stitch holding the testis down; by narrowing the external ring in such a case the testicle can be retained in the scrotum, and cannot get into the inguinal canal, but the result is not perfect and is likely to help the development of the testicle.

After the operation it is customary at the Evelina Hospital to place the child in bed upon a divided mattress, the intervening space being occupied by a bed-pan, on which rests a rubber ring. The child thus lies on the bed-pan, with an ordinary air-ring beneath his buttocks. He has a bandage tied round each ankle secured to the end of the cot, and a webbing bandage across his chest, so that he cannot move about.

Again, do not circumcise a child before you operate on the hernia, because the foreskin is a good director of the urine; a test-tube with the bottom knocked out may be fixed with strapping round the foreskin, and this leads into an ordinary bottle.

At the operation a sealed dressing is applied, and is taken off on the eighth or ninth day, when the sutures are removed and another collodion dressing is applied. The patient should lie in bed ten to fourteen days, and then is able to get up and go home.

Change of Address.

Dr. J. B. Copland, from Banks Terrace, Sheerness, to the Victoria Hospital for Children.

Mr. W. Ilbert Hancock, F.R.C.S., from 19, Harley Street, W., to 27, Queen Anne Street, W.

Captain F. H. Hardy, R.A.M.C., from Colchester to Mill Hill.

Captain L. Humphry, R.A.M.C., from the Eastern Command to Shorncliffe.

Dr. W. J. Lindsay, from 15, College Road, Bromley, Kent, to 273, Milkwood Road, Herne Hill, S.E.

Dr. R. O. Moon, from 50 to 45, Green Street, Park Lane, W.

Dr. L. J. J. Orpen, from Guy's Hospital to the Southwark Infirmary, East Dulwich Grove, S.E.

Lieutenant A. C. Osburn, R.A.M.C., from Agra to Calcutta.

Lieutenant G. H. Rees, M.B., is posted to Portsmouth for duty.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Correspondence.

To the Editor of Guy's Hospital Gazette.

Some Criticism and a Suggestion.

Dear Mr. Editor,—You almost seem to welcome criticism: so here it is. When you are short of ideas, do not rack your brains, but merely chronicle the small beer; give us, who are perforce detached from it, that graphic description that we yearn for of all the incessant alterations in the hospital, personal, structural and medical.

Doubtless you think you do. But where is there any detailed and illuminating description of the fabric alterations (considering that Guy's has been re-built in the last eight years)? Where is there any introduction, other than name, to the rising lights? and we, as G.P.'s, yearn for the novel (our patients insist on it).

To take the instances to hand:—

1. Has there been any account of Dr. Eyre's and others' labours in the Opsonic department, except an amateur's? (Why not extract one from Dr. French, or the fountain head?) Have any got well, or has any treatment been done? If so, it has escaped record in the Gazette.

2. Where is there any account of Malta Fever, or of his researches on that subject? Is Wright the only microscopist?

3. Is there an Orthopædic department? and can it have been established two years? Possibly there is some one in charge; we, your readers, are ignored.

4. It is a melancholy fact that most new ideas reach medical men through the lay press, and that we are frequently confounded by their close acquaintance with novelties—an acquaintance often far closer than ours. We look to you to remedy that.

If I may sample news, we should like to know what they all teach and practise, and to take instances, to hear Dr. Beddard's views on modern treatments. We love to know what organs W–ll–y is attacking. Do they wash out the septic peritoneum, or do they mop? Except from "Lighter Vein," we should not know that he was excising the colon, and we long, nay positively crave, for an impartial disquisition on the results of *all* the recorded cases by the cold pen of the onlooker.

Now, sir, news is scarce when the editor is either wearied or indolent. I, as a former passim-pusher, can excuse him for being both. GLAUCOPIS.

[We refer to this letter in Passim.—Ed.]

"Some Cases of Suppuration in the Bladder."

Sir,—In your issue of September 8th a paper read before the Physical Society appears under this heading, and as you have recently invited criticism upon your articles, I wish to draw your attention to a few points on this subject. Discussing the difficulties in diagnosis of

these cases, Mr. Greene remarks that "hæmaturia makes us think of some tumour of the bladder, especially if the attacks are sudden and of rare occurrence." Granted that the hæmaturia is of vesical origin, sudden profuse hæmaturia certainly suggests a villous tumour, simple or carcinomatous, but the attacks may be of frequent rather than rare occurrence. I have pointed out elsewhere that sudden hæmaturia is frequently the earliest symptom of prostatic enlargement, but vesical calculus rarely gives rise to *profuse* hæmaturia.

Mr. Greene omits to discuss the most common symptom in vesical disease, namely, increased frequency of micturition, which in elderly subjects is the most common symptom of prostatic enlargement, and in younger patients is so often the first symptom of tuberculous cystitis. Further than this, the relation of the increased frequency of micturition during exercise and rest is most important in the diagnosis of calculus.

In discussing the character of the pain in vesical disease, we read that "in cases of growth or obstruction about the fundus of the bladder, the pain appears to be referred to the end of the penis." The term fundus has been applied by some to the summit of the bladder, and by others to the whole postero-inferior surface, but it is only when a growth or ulceration extends on to the trigonal area, or when a calculus touches this area at the termination of micturition, that the pricking pain in the glans penis is noted. Disease of the post-trigonal area gives rise to pain at the sacral base, whereas disease of the summit causes hypogastric pain.

With regard to the physical examination, we are told in truth that a prostate with an intravesical enlargement may only appear of normal size when examined per rectum. Certainly, but let the surgeon examine the prostate bimanually, and he will soon appreciate the value of this examination. I believe Mr. Freyer was the first to point out the great value of this method, and it is surprising how easily a prostate can be felt bimanually. That a distended bladder may simulate a growth, I am unable to conceive, for surely the surgeon would know how much fluid the bladder contains before venturing an opinion upon a rectal examination.

Mr. Greene truly says the fallacies of sounding a bladder are many, and I would here simply remark that in any case in which the sound is called in as an aid to diagnosis, it is far better to use a cystoscope, and ascertain by *direct* vision not only the nature but the extent of the trouble. Cases of early growth and vesical tubercle are often mistaken for calculus by the similarity of their symptoms, and damage is done by sounding, whilst little harm can result from a proper cystoscopic examination, and a correct diagnosis can usually be made.

With regard to the treatment of these cases, there are one or two points for discussion—first, the relative merits of lithotomy and lithotrity. I am convinced that in the great majority of cases lithotrity is by far the preferable operation, but where calculi form behind an enlarged prostate, suprapubic cystotomy, with subsequent removal of the stones *and* the entire prostate, should be recommended, for if the prostate is left or only partially removed, a suprapubic fistula is almost sure to remain. It may certainly be advisable to remove the calculi and treat the cystitis locally before removing the prostate, but this is seldom the case. The best fluid for irrigating a foul bladder is hydrogen peroxide—ʒj. of a 20 vol. solution in a pint of water—which will clear up a case of cystitis much quicker than Thompson's fluid.

The operative treatment of prostatic enlargement has been so fully discussed of late that little need be said except to emphasise the great advantage of Freyer's operation over all partial and nibbling operations on the organ. The success that has resulted from this operation in such feeble and broken-down subjects is most marked, and the mortality in a large number of cases does not exceed 8 per cent. Whether the prostatic urethra is removed with the prostate makes no difference, and in the large number of these operations that I have seen, the prostatic urethra is almost invariably torn through the distal part of the promontorium. During 1903 I attempted on several occasions to remove an enlarged prostate soon after death, with especial care to leave the prostatic urethra intact, but on subsequent removal of the pelvic viscera, I found the urethra torn and so thin that I have little doubt that it would have sloughed in a living subject, whereas anatomists maintain that the prostate cannot be stripped from the urethral wall, so intimately are they blended.

I must apologise for the length of this letter, but when I read your article last week I found so many points in it inviting criticism that I am afraid I am trespassing rather largely on your valuable space.—I am, yours truly,

R. H. JOCELYN SWAN.

75, Wimpole Street, W.

The Discovery at Cobham.

Dear Sir,—I do not think Guy's men need go as far as Cobham or Bristol to see a dried cat with a dried rat it its mouth, as in my hospital days there was a very good specimen of these in a glass case, kept in the old Anatomical Museum. I believe the cat was found jammed in the rafters of an old house, near the hospital, which was being pulled down, and was supposed to have been there about twenty years. The cat and rat were quite dead when found.—Yours truly,

W. G. STURGES-JONES.

Herne Hill, Sept. 24th, 1906.

Dear Sir,—I enjoyed, as doubtless all your readers did, the excellent and interesting account of a visit to Cobham, which appeared in the last issue of the Gazette.

The question as to the death of the cat, or the reason why it died in the church, I am not competent to answer. If I remember rightly, however, a mummified cat, almost identical in appearance to the animal figured

by Dr. Fisher, used to be kept at Guy's in an old case somewhere in the Museum. It had, I believe, been found in a house in Newcomen Street. Another example of a mummified cat, with a rat or mouse in its mouth, is to be found (or used to be found) in a Borough tavern, but I do not know anything about its history. I remember, also, having seen a somewhat similar specimen in a public-house at Edinburgh. The suggestion that the cat was faked up, and intentionally placed in the church, is certainly a plausible one. I do not know if the Church had much to do with cats in the past, but I believe I am correct in stating that cats' images do exist in some churches.—I am, etc.,

Hampstead. INTERESTED.
September 29th, 1906.

The Presentation to Dr. Forsyth.

Dear Mr. Editor,—May I find space in your columns to return my best thanks to the Guy's men who so generously gave me a parting present? Its handsomeness alone would make it valued, and I prize it no less because it came unexpected; belying its solidity, it cast no shadow before. Most of all, however, do I set store on it for the kindly-worded inscription graven on the lid; the words seem to impart a warmth of friendship, even to the cold metal.

If I may be allowed one little complaint, it is that my strongest weakness has been pandered to, but then I hope some of my old friends at Guy's, who are similarly frail, may be tempted now and again to share the contents of the box with me.—I remain, yours faithfully,

DAVID FORSYTH,
85, New Cavendish Street, W.
October 1st, 1906.

A Miniature Rifle Club.

Dear Sir,—May I crave a small space in your Journal to advocate the formation at Guy's of a Miniature Rifle Club? Of the national importance of this question, anyone who has read Lord Roberts' numerous speeches in connection with rifle shooting and the formation of these Clubs, cannot but be impressed by their usefulness, if not necessity. As an aid to shooting with the service rifle, the use of the miniature rifle is an already well-proved factor. In proof of this, the 2nd Battalion Coldstream Guards in the recent Army Rifle Competition practically carried all before them. Through the initiative of their Colonel, the privates of this regiment are trained with the miniature rifle. Such a club might be formed in connection with the present Rifle Club, or as a separate entity, making yet another constituent, and a very remunerative one, too, to the Clubs' Union. I imagine there must be sufficient room, from all I have heard, for the erection of three but s of 25 yards, 50 yards, and 100 yards, respectively, at Honor Oak Park. The actual amount of space required is roughly 125 yards by 40 yards, at the very outside. Perhaps, also, the authorities that be might be willing to allow the erection of a 25 yards range within the hospital premises, either in the Park—I imagine there is space behind the Dissecting Room—or in one of the numerous underground passages, if these have not already been removed by the many improvements of recent years. One of these lighted with electric light would make an ideal indoor range. The outdoor ranges need not be costly to build; the profit from the sale of ammunition would quickly wipe that cost out. Given that the movement attained success (I am sure it would), a short period would see yet another Inter-hospital Cup for competition.

If you, Mr. Editor, think anything of this, a meeting, with a member of the Staff presiding, might be held in one of the theatres, and I think "this thing" could be made to go. For myself, if a meeting could be held, I should be very glad to take a part in the formation of a club, and as a member of the committee of the Southfields Miniature Rifle Club, could bring you in contact with those who know all there is to be known concerning this movement. Moreover, I see the name of an old Guy's man as a Member of the Council of the Society of Miniature Rifle Clubs, Dr. Lockhart Stephens. He, I know, has been identified with other movements at Guy's; I am sure an appeal to him for advice would not be made in vain. I fear I have trespassed on your patience, the importance of the subject must be my excuse.—I am, yours truly,

JAMES. B. HOWELL.
86, North Side,
Wandsworth Common, S.W.
October 1st, 1906.

[The suggestion is certainly worth considering, and a rifle range behind the Dissecting Room, if there were space for a range (which is doubtful), would, no doubt, be highly popular, especially as quoits appears to have gone out of fashion. What the Superintendent would say of it is another matter. However, we gladly print our correspondent's letter. Possibly the Secretary of the Rifle Association might care to interest himself in the matter.—Ed.]

Appointments.

Civil.

Allport, E. G., M.R.C.S. Eng., L.R.C.P., has been appointed Port Health Officer for Port Esperance, Southport, and Recherche, Tasmania.

Copland, J. B., M.R.C.S., L.R.C.P. Eng., has been appointed Medical Officer to the Victoria Hospital for Children.

Orpen, L. J. J., M.A., M.B., B.Ch. Oxon., has been appointed Assistant Medical Officer to the Southwark Infirmary, East Dulwich Grove, S.E.

Military.

Lieutenant-Colonel J. V. Salvage, R.A.M.C., is appointed Sanitary Officer, Eastern Command.

Aspects of German Medicine

By Arthur F. Hertz, M.A., M.B., M.R.C.P.,
Radcliffe Travelling Fellow.

At international medical meetings, after-dinner speakers are wont to refer in eloquent terms to the brotherhood of medicine, which knows no distinction of race or nationality. True as this may be in theory, it does not prevent the practice of each country advancing and developing along lines of its own, little influenced by the advances and developments of the science in those countries where different languages are spoken. It was ten years after much of the original work had been done that the epoch-making physiological discoveries of Pawlow in St. Petersburg began to be known and taught in England. This is perhaps hardly surprising, considering how few Englishmen understand the Russian language. With two countries like England and Germany such an occurrence would seem to be impossible. But a year spent in Germany has convinced me how little English medicine is appreciated in Germany, and how much good work is done in Germany which passes unnoticed in England.

The object of these papers is to give a sketch of some of the chief features I have observed in the German hospitals, which differ from what is usually seen in England.

I.—The German "Klinik."

The visiting staff of hospitals in Germany is generally much less numerous than in England. In the very large institutions such as the Charité in Berlin, which contains as many as 1,600 beds, there may be two physicians and two surgeons, but frequently in others as large as Guy's there is only one man at the head of each department.

The visiting physician is nearly always a professor, although he is not necessarily attached to a university, as professor is merely a title without any special significance as to teaching. He has generally some six assistants, one of whom is often an army doctor. Sometimes the senior assistant is an extraordinary professor, and frequently some of the elder ones have the title of privat-docent, which corresponds fairly closely to that of demonstrator or lecturer at an English university. When appointed, an assistant is of the same standing as a house-physician is with us, but instead of keeping the appointment for only six or twelve months, he stays on indefinitely—often for several years—until he receives an invitation to become physician to some out-patient department or other hospital, or weary of waiting goes into general or special practice.

Each professor with his assistants has a department or "klinik" complete in itself. Thus in Munich each of the two visiting physicians has not only his own wards with extra rooms for his private patients, but also well-equipped chemical, bacteriological and experimental laboratories for the sole use of himself, his assistants and any German or foreign qualified men who may wish to work under his direction. The clinic has in addition one or more lecture-rooms and a library with a reading-room, which is generally well provided with periodicals, though I noticed that foreign journals were as a rule conspicuous by their absence.

In the same way each of the clinics for surgery and for gynæcology, for children, for diseases of the eye, the throat and the ear, has its professor and assistants, with laboratories, lecture-rooms and library. There is generally also a clinic for insane patients, with which that for nervous diseases is often combined, and one for venereal diseases and dermatology, which are always classed together. Each clinic has generally its own out-patient department, which is either under the control of the director himself or else of a more junior professor.

The assistants generally make their rounds at about eight o'clock in the morning and five o'clock in the afternoon. The professor visits the clinic every day and goes more or less rapidly round the wards with the corresponding assistants and examines the new and specially interesting cases.

As an assistant is rarely promoted in his own hospital or even in his own town, a reputation for good clinical work is not of much use to him, and he depends almost entirely on the researches he publishes for any chance of receiving higher appointments. He therefore spends a large proportion of his time in the laboratory, and most of the ward visits are very perfunctory in character, many assistants completing their rounds in a quarter or half an hour, although each has generally about fifty beds under his care.

The younger professors have also every inducement to work in the laboratory, as their promotion from an out-patient appointment to the professorship of a clinic or from a small to a large clinic depends mainly on the value and amount of research work they have done. Only when a physician has obtained the highest

appointment which he hopes to attain can he rest on his laurels; then, indeed, there is no need for hurry, as the age limit does not exist in Germany, and one sees professors of 76, 75 and 72 still at the head of the clinic to which they were appointed thirty or forty years earlier.

As there may be as many as two hundred students attending one clinic, it is obviously impossible for a single physician to teach all at the bedside. Hence true clinical instruction by the visiting staff is almost unknown, its place being taken by clinical lectures. A professor told me he preferred the English system, but the large number of students made it impracticable in Germany; personally, I should say that it is the small number of professors rather than the large number of students which is the cause of the difficulty.

The professor generally holds his clinic, as the lecture is called, every morning during term time; in some places it begins even in the winter at the unpleasantly early hour of 8 a.m. One of the most distinguished German physicians is said to have resigned his appointment in Strassburg because the authorities would not permit him to give his clinic later than eight o'clock in the winter, and he considered that when a man approaches the age of sixty he is entitled to lie in bed on a dark and frosty morning later than six o'clock.

The clinic lasts an hour or an hour and a half, one or more patients being brought into the lecture-room in wheeled beds. The professor reads an abstract of the history of each case; he then demonstrates its principal features and shows any reactions of the urine which may be of importance. If the blood is abnormal, specimens are exhibited under microscopes for examination at the close of the lecture. After the patient has been taken away, the diagnosis, pathology and treatment are discussed.

In the course of a term there are few important diseases examples of which are not demonstrated in the clinic. Cases of acute infectious fevers, such as measles, chicken-pox and mumps, are shown, and a patient can hardly be too ill to be considered suitable for demonstration in the clinic. Severe cases of typhoid fever and of pneumonia or heart failure are often brought in, and I have seen a man almost *in extremis* have his chest aspirated in the lecture-room. In a large clinic very striking demonstrations can be made owing to the abundance of material. During a lecture on tabes given by Professor Müller in Munich no fewer than nine patients in different stages of the disease, in addition to one with general paralysis, were shown. The progress of the more important cases is followed by having the patient periodically brought into the clinic.

The female patients are never accompanied by nurses in the clinic, and I have actually seen in a combined dermatological and venereal disease clinic a series of women placed in the lithotomy position for examination of their genitals before an audience of some hundred men, the only concession to their modesty being a bandage tied over their eyes. In most clinics it seems to be usual to expose the legs for examination by removal of the bed-clothes from above instead of below, and I have more than once seen men lying exposed before an audience of students, amongst whom were several women, without a covering of any description.

Morbid anatomy is generally very much neglected, but Professor Müller at the conclusion of each clinic shows an admirable series of microscopical specimens with the lantern to demonstrate the pathological changes associated with the diseases of which he has shown examples during the previous hour. Curiously enough, however, museum specimens are very rarely shown, the old gross morbid anatomy being replaced instead of supplemented by the more modern microscopical pathology.

If a patient who has been shown in the clinic subsequently dies, the professor and his audience frequently go to the pathological department to see the professor of pathology do the autopsy. The post-mortem examinations are generally far less thorough than at Guy's; if Addison had not discovered that destruction of the supra-renal glands is the cause of the disease which now bears his name, the fact would certainly never have been discovered in Germany, as I did not see a single autopsy in which the glands were examined. Frequently, also, only about a foot of the intestine is opened, and that is done inside the body, so that a very disagreeable mess results. The separation of the pathological from the clinical aspect of a case is far too pronounced, as no clinical history is ready before the post-mortem examination is done, and it is only in a small percentage of cases that anybody who has seen the patient during life is present at the autopsy to enable the audience to correlate the signs and symptoms with the post-mortem findings.

In a medical school, where clinical lectures to a large extent replace bed-teaching, it can be readily understood that the theoretical knowledge of the students becomes more developed than the practical. Junior students attend during their first medical semester or half-year

a theoretical course of lectures on physical diagnosis, and in Munich they visit the wards two mornings a week for an hour, when they are divided into groups of six, each group being given a single case to examine. But the examination has reference only to the particular subject of the theoretical lecture; if percussion of the heart has been discussed, each group is expected to mark out the relative and absolute cardiac dulness of the patient it is examining, without paying any attention to the lungs in a case of pulmonary disease or to the abdomen if a tumour is present.

After this preliminary semester the students are called "praktikanten," and one or two of them are called down during the examination of each patient in the clinic in order to see the patient at close quarters and to be subjected to questions on the case by the professor. When the clinic is a popular one, each student can only be called down at long intervals, so that he gets but little practical advantage from the system. In some clinics junior professors and privat-docents give a certain amount of instruction by the bedside, and in a number of out-patient departments senior students are allowed to examine and even treat patients under supervision. Students are also often appointed "co-assistants" in the wards, being then required to write the clinical reports. The appointment, however, is not compulsory and there is no great competition for it, as the innumerable lectures the students are expected to attend leave little time for work of this description.

Thus the total amount of clinical experience a German student gets is very inadequate. In one of the most famous medical schools the majority of students have no stethoscopes of their own and are obliged to borrow the professor's when required to listen to the heart or lungs of a patient in the clinic!

It is somewhat surprising to find that the majority of students have no great difficulty in passing the State examination, which must be got through before a man is allowed to practise, although this is largely clinical and *viva voce*. Probably the explanation is that they are generally examined by the professors whose clinics they have recently been attending. Almost everybody also takes the degree of doctor of medicine for which a thesis must be written, but the standard required for this is very low. Only in a few instances are men sufficiently keen to do a good piece of laboratory work for their theses.

The inefficient practical training of medical students in Germany has in recent years been to some extent remedied by a law which makes it compulsory for every newly qualified man to spend a so-called practical year before he is allowed to practise. During this year he must be attached to some recognized hospital or laboratory. He has generally some appointment equivalent to house-physician or house-surgeon, but as a year's work as assistant in a physiological or other laboratory is regarded as an efficient substitute, he need not gain much practical knowledge during this period.

One of the few advantages which the medical training in Germany has over the English system is the custom of spending one or two semesters in a number of different clinics instead of remaining permanently in one hospital. By this means a wider outlook is obtained than would otherwise be possible. Several Germans expressed their surprise to me that a man belonging to one London hospital is not encouraged to visit others, and that a visit to Edinburgh is as rare as a visit to a German clinic. The system of wandering is continued after the student period is passed, as professors are promoted from town to town of increasing importance and are comparatively rarely advanced from one position to another in the same university, Thus a professor in one of the great clinics has often been a student and teacher at as many as half a dozen universities.

No German hospitals suffer from a chronic state of poverty — the usual condition of the English hospitals which depend for their maintenance on the charity of private individuals. This is largely due to the splendid system instituted by Bismarck of compulsory insurance for all workmen with an income of less than £100 a year. Every labourer is insured against accident, the premium being paid by his employer. He is also insured against sickness, his employer paying one-third of the premium, the rest being paid by the workman himself. Lastly, there is insurance to provide for old-age and invalid pensions, the employer, the employed, and the State sharing in the expense. The fund, which has now been in existence for twenty-five years, has accumulated a balance of £75,000,000.

Besides paying the insurance and pension money, the income is amply sufficient to provide admirable institutes for chronic invalids and for the aged. It is naturally also the great object of the management of the insurance funds to diminish the amount of illness as

much as possible. For this reason they devote large sums of money to the building of sanatoria for consumptives, and it is never difficult for a clinic to obtain as much as it requires for improvements or the provision of new apparatus. In addition to this source of income, most hospitals receive payment from their in-patients; at the Charité, in Berlin, each in-patient pays from one to three shillings a day.

Members of the medical profession suffer to some extent from the insurance system, as any workman may consult any practitioner, who is only paid one shilling for the consultation. But the system does not seem to be much abused, as the workmen rarely go to any doctors other than those in the poorer neighbourhoods, and the system is probably not more unsatisfactory than that of the sick clubs in England. Moreover, a large proportion of these patients would in England go to the free hospitals and would not even be the means of providing the doctors with a fee of a shilling. When a doctor thinks one of these patients is sufficiently ill for hospital treatment he sends him to the hospital, where he is admitted as a matter of course. The result is that the proportion of acute cases in the German hospitals is much smaller than in England, as the large number of available beds provide accommodation for many patients suffering from mild or chronic diseases, which in England would be either treated as out-patients or sent to the poor-law infirmaries.

(To be continued.)

Guy's Hospital Clubs' Union.

CONSTITUENT INSTITUTIONS.

The Cricket Club.—President: Sir Alfred Fripp, C.B., C.V.O., M.S. *Captain*: E. Burnett. Vice-Captain: A. M. Tolhurst. Secretary and Treasurer: P. Smith. Captain 2nd XI.: M. M. Munden. Vice-Captain: W. T. Clarke. Captain 3rd XI.: G. B. Cockrem. Committee: G. Llewellyn, F. Kahlenburg, L. G. Davies, J. S. Bookless.

Guy's have an excellent ground, with one great advantage over the grounds of other hospitals: namely, that it is within easy distance of the hospital. This enables students, who have not much time to spare, to run down for an hour or so at the nets any evening.

This year we had an excellent team, but were beaten by London Hospital in the Cup-ties after a very exciting game. There is a keen determination amongst old students to regain the Cup next year, and we shall welcome assistance from new students.

Since the institution of the Hospital Cup in 1882, we have won it on fifteen occasions.

Besides the Cup-ties, we have matches with nearly all the best-known clubs round town, and very enjoyable games they are.

Nursing News.

Matron's Office.

There have been several changes on the Nursing Staff lately. On Thursday, September 27th, Miss L. M. Tippetts, Miss H. Newton, Miss G. Morrah and Miss E. R. Smith left Guy's Hospital to take up their new appointments at the Mayo Hospital, Lahore. Before leaving, Miss Tippetts was presented with a dressing-case by the Nursing and Female Administrative Staff, Miss Morrah and Miss Newton also being the recipients of dressing-cases from the Surgeons and the present and past Dressers in their respective wards. Miss Mabel A. Chittock, who completed her training in 1903, and has since been Sister at Charing Cross Hospital, Assistant Home Sister and Night Superintendent at Guy's, has been appointed to succeed Miss Tippetts as Assistant Matron. Miss Frances A. Sheldon, who has been Sister in Charge of the Wardmaids, succeeds Miss Newton as Sister of Lydia Ward. Mrs. I. F. Hill, who has been Theatre Sister and Night Superintendent, has been appointed as Sister of Charity Ward. Miss Edith Lear, who completed her training in 1905, and has since been Instructress in the Preliminary Training School, has been appointed to succeed Miss K. B. Webb (Home Sister), as Sister of Astley Cooper Ward.

Miss A. E. Davidson, Sister Job, has been appointed Matron of L'Hôpital Ruffi, Nîmes, Gard, France, and takes up her duties on the 17th inst. Miss Davidson entered Guy's in November, 1893, and has since been on the Private Staff of the Nurses' Institution. She has been Night Superintendent, and Sister of Job Ward, and went out to nurse the wounded in the Turco-Greek and South African Wars. She will be assisted at Nimes by Miss Helen Lambert, Sister Bright, who is going with her as Assistant Matron. It is interesting to note that L'Hôpital Ruffi was founded in 1360, by a Mons. Ruffi, and holds over 300 beds, 50 beds being set apart for the soldiers. The hospital is partly under Government, and hitherto the nursing of the sick has been done by the Nuns. Both ladies will carry with them the best wishes of all Guy's men for their success.

Sister Bright is succeeded by Miss E. Windemer, who has been on the Private Nursing Staff, and has acted as Instructress in the Training School, while Miss Macfarlane takes charge of Job Ward. Among other changes we have to report are the appointments of Miss A. H. Clarke, Sister of the Housekeeping Department, as Instructress in the Preliminary Training School; of Miss Jessie Orr, Sister of Patience Ward, as Sister of the Housekeeping Department; of Miss Elsie G. Fraser as Medical Night Superintendent, and of Miss Lissie Bonser as Sister of Patience Ward.

Reviews.

The price of books submitted for review should in every case be stated.

Indications for Operation in Disease of the Interna Organs. By Prof. Hermann Schlesinger, M.D. Translated by Keith W. Montserratt. Pp. xv. and 498 (Messrs. Wright & Co., Bristol.) 9s. 6d. net.

In the translator's preface to this book we are told that Dr. Schlesinger's reputation as a clinician and writer is a sufficient explanation in itself for the translation of his work; but, after reading it, we are forced to the conclusion that a great opportunity has been wasted. A physician's views on the justification for operation in various conditions is a theme of infinite possibilities in a capable writer's hands, and one the exposition of which should be of great use to the general practitioner.

Perhaps the ideal in such a book is almost impossible —perhaps it is only at the bedside, and with a particular case before him, that a physician can adequately teach on such a subject. At all events, we feel that this work has not attained to any greatness, it tells us very little that is new, and fails on many points to convey to the reader information that he hopes for.

The best chapters in the book are those on the surgical treatment of various lung conditions, such as bronchiectasis and pleural effusion—probably because patients suffering from those conditions always consult a physician first. Yet when we turn to stenosis of the larynx, of which the author must surely have seen many cases, we find only ten lines devoted to indications for operation, even though "stenosis" includes growths of the larynx.

In the indications for tracheotomy no mention is made of restlessness or inability to sleep or to lie down. The stereotyped advice is repeated that operation should be performed "when inspiration is prolonged, expiration noisy and the chest indrawn." Very good in its way, but not enough: we have all seen patients in that condition, and yet in no need of tracheotomy.

We should have liked a chapter on indications for operation after an abdominal injury; as it is, we have to seek the information in many chapters, such as diseases of the intestines, diseases of the spleen, diseases of the kidneys, &c. The chapter on ulcer of the stomach is good, but we are rather surprised to hear that "most writers agree in recommending operation in acute Bright's disease"—under certain conditions.

As we said before—a disappointing book.

Pathology, General and Special. By R. T. Hewlett, M.D., M.R.C.P., D.P.H. Pp. 540. (J. & A. Churchill.) 10s. 6d. net.

"However desirable it may be in theory that the student of medicine should possess a wide knowledge of pathology, it must be remembered that the majority of medical students become medical practitioners, who require only such knowledge of pathology as will aid them in the art of healing." The preceding paragraph from the preface shows the aims and limitations of the book. Within the limits which the author has set himself, he has given a clear if brief account of the subject. The volume is throughout readable, and is illustrated by some excellent microscopical plates and microphotographs. Anything like a full descussion of pathological processes is in a small work out of the question, yet here we have the chief theories and points in their favour set before us. The more recent work has received full attention, *e.g.*, in the section on the ætiology of neoplasms, the recent work of Farmer and others on reduction division receives mention. Opsonins are dealt with in their proper place, and Mayo Robson's work on pancreatitis is discussed. On reading the book, however, one is disappointed that the various theories and experiments are not described in greater detail, as an impression of incompleteness is conveyed by the peculiarly brief descriptions given by the author. Descriptions of morbid tissues are for the most part omitted, as the author believes a knowledge of this branch of the subject can only be properly acquired in the post-mortem room.

Clinical Bacteriology and Hæmatology. By W. D. Este Emery, M.D., B.Sc. Pp. xxiii. and 240. (H. K. Lewis.) 7s. 6d. net.

This is the second edition of a very useful handbook, and contains a good deal of new matter. Its chief feature is the very full and careful description of technique, all details which aid so much in obtaining good results being included. It shows how much can be done by simple bacteriological methods towards the correct diagnosis of disease. The identification of parasites is as far as possible identification by their morphology and staining properties rather than their cultural characteristics.

Methods of examination of morbid materials obtainable from the body in disease are carefully described, and the interpretation of results discussed. We are surprised to note complete omission of the identification of intestinal parasites by examination of the fæces in this section. Wright's method of finding the opsonic index is described in full, and should prove of great value to practitioners. Hardening, embedding and section-cutting of tissues are carefully described.

The second section of the book is devoted to hæmatology, and the methods which the author has found to give the best results are described. It consists for the most part of hæmoglobin estimation, blood-counts and differential leucocyte counts. The most useful chapter in this section is that discussing the interpretation of results.

A chapter on cyto diagnosis completes the volume. The book should prove very useful, and is carefully written. Some excellent coloured plates and microphotographs add greatly to the value of the work.

An Appeal.

The Gazette *is the official organ of the Clubs' Union, and as such every member of that Union has a share and an interest in it. It depends for its matter almost entirely upon contributions that may be sent in. How uncertain and precarious such dependence is only those who have had to superintend the production of the paper can rightly comprehend. Voluntary contributions are few and far between, sometimes unsuitable, and generally so scanty that the Editor has to fall back upon a few staunch supporters who can be relied upon for an occasional article to eke out the "copy." Such a state of things is unsatisfactory in the highest degree, and we would, therefore, appeal to students, especially new comers, to help us. There is a box in the colonnade, a box of ancient manufacture and somewhat disreputable appearance, but it serves its purpose well enough. The only drawback is that at present it never contains anything. The Editor makes periodical visits, in the vain expectation of discovering something in its interior, only to find that, like the cupboard in the nursery story, it is empty and bare. For the box is supposed to hold hospital contributions to the* Gazette, *and such contributions are rarely forthcoming.*

We sincerely trust that in the future the box in the colonnade will contain something that is worthy of consideration, and as present students appear to be apathetic, we appeal more particularly to new men for contributions. Anything, no matter how trivial, will be carefully considered. The rules of the Gazette *regarding voluntary contributions are not strict, and practically everything stands a chance of being accepted and published. What we want more especially are literary and artistic contributions, verse, sketches, photographs, articles on any subject from 300 to 3,000 words in length. The Editor will, at all times, be glad to consider such articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Payment is a matter of arrangement, and the fees that the* Gazette *can offer are merely nominal, but if the writer desires any remuneration that fact should be stated.*

From the Gazette's Special Pathologist.

T.C., Blackpool.—Reaction faintly alkaline. Sp. gr. 1009. Albumen, 0.5 parts per thousand, or 0.22 grains per ounce. Urea, 0.5 per cent., or 2.2 grains per ounce. Blood, vide infra. Sugar absent.

Microscopical examination of the centrifugalised deposit.—There are to be seen a few red blood discs, renal cells, and well-defined hyaline tube casts. A small number of calcium oxalate crystals are present, and there are abundant putrefactive bacteria which are most probably adventitious.

V.J.H., Westcliff-on-Sea.—No tubercle bacilli were detected in this specimen of sputum, which was somewhat decomposed.

PATHOLOGIST.

Papers by Guy's Men.

The Epidemiology of Plague. By J. Ashburton Thompson, M.D., D.P.H.—*Australasian Medical Journal* for August, 1906.

Phlegmonous Cholecystitis. By G. A. Wright, M.B. Oxon., F.R.C.S. Eng.—*The Lancet*, September 22nd, 1906.

Books, etc., received. — Second Report of the Research Laboratories, Gordon Memorial College, Khartoum; Upsala Läkareförenings Förhandlingar and supplement, Festskrift Tillegnad, Olaf Hammersten, Medical Review, Vols. vi. and vii. (1904 and 1905) of the Transactions of the Association of Hospital Superintendents, Bristol Medico-Chirurgical Journal, Bulletin of the Johns Hopkins Bulletin.

Births.

BALDERSTON.—On September 30th, at 17, Westbourne Road, Forest Hill, S.E., the wife of Robert Balderston, M.B., of a daughter.

DENYER.—On September 20th, at 75, Gordon Mansions, Gordon Square, W.C., the wife of Stanley E. Denyer, C.M.G., M.A., M.D., B.C. Cantab., of a daughter.

GOUGH.—On September 25th, at Compton Martin, near Bristol, Somerset, the wife of Bernard Bradley Gough, M.R.C.S., L.R.C.P. Lond., of a daughter.

PEDLEY.—On August 24th, at Wave Crest, Whitstable, the wife of S. E. Pedley, L.R.C.P., M.R.C.S., L.D.S. Eng., of Camberwell, and Regent House Circus, W., of a son.

Marriages.

BIGG—HEWETT.—At St. Stephen's Church, Westbourne Park Road, W., on the 2nd inst., by the Rev. Charles Bigg, D.D., Canon of Christ Church, and Regius Professor of Ecclesiastical History, Oxford, uncle of the Bridegroom, assisted by The Venerable C. F. H. Johnston, M.A., late Archdeacon of Bombay, Edward Bigg, M.A., B.C. Cantab., L.R.C.P., M.R.C.S., of Cranleigh, Surrey, only son of the late Edward Bigg, of Liverpool and Bombay, to Agatha Gertrude, second daughter of Edward Hewett, of 22, Princes Square, W., formerly of Bombay.

CLARK—LUXTON.—On August 2nd, at St. George's Church, Malvern, Australia, J. Kenneth Clark, L.D.S. Eng., to Clara, eldest daughter of the Hon. Thos. Luxton, of Wattle Tree Road, Malvern.

Silver Wedding.

SYKES—REYNOLDS.—On September 14th, 1881, at the Parish Church, Marylebone, John F. J. Sykes, M.D., D.Sc., son of the late John Sykes, of Fitzroy Square, W., to Jane, daughter of John Reynolds, of Dorset Gardens, Brighton.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

PROFESSOR CLIFFORD ALLBUTT'S address at the opening meeting of the Physical Society was a fine effort, for which those who had the pleasure of listening to it will long remain grateful. It is well that so essentially clinical a society should on occasion devote its attention to the contemplation of the abstract, and the opening meeting has always afforded a legitimate opportunity for going outside the exact circle of things clinical. Hitherto we have been fortunate in our lecturers. They have all given us something to think about, not merely for the evening, but usually also for the whole session.

NONE of us, probably, will agree with Dr. Allbutt in everything, but there are many points on which everyone will be in harmony with him. The relative value of words and things is more clearly understood when a man grows older. Youth, with Keats, will always take delight "in mouthing things that fall sweetly on the ear," without paying much attention to what the things mean. Who is there among us juniors who has not felt a shudder of pride when he came across such grand expressions as "erythromelalgia," "demodex folliculorum," and other high-sounding titles for nothing in his text book? They prove to us that imagination is not so dead in the profession as some people think. "We consecrate a deal of nonsense because it was allowed by great men," and if some of us err in preferring words to things, we can at least claim that we sin in good fellowship. When Homer and Milton are ranged among the goats, the scientist who invents new names for problematical things, may almost regard it as an honour if he, too, is included in the capridæ.

IN our next issue we hope to publish the text of Professor Allbutt's paper in full. No condensed abstract can do justice to its brilliancy, and under the circumstances we prefer the delay to giving our readers the epitome which could have been included in the report of the meeting on another page in this issue. Meanwhile we content ourselves with expressing our thanks to Dr. Allbutt for what might be described, to use a trite and hackneyed expression, as "an intellectual treat." We only hope that at some future occasion he may feel inclined to consider Sir Samuel Wilks' invitation, and give us an equally interesting paper on the origins of words.

Mr. Symonds' introductory lecture on Surgery came as a pleasant surprise. And yet no one who has attended his "clinicals" or his ward demonstrations, could have imagined that he would make his ordinary surgical lectures less interesting or less fascinating than he has contrived to make his Monday afternoon rounds. Surgery is not a dry, mechanical art—for all that Monsieur Argan in "Le Malade Imaginaire" may have said to the contrary—but there are few lecturers who start from precisely the same lines which Mr. Symonds has set himself to follow. The old lectures were instructive, interesting and informative enough: few of us, however, would have applied the adjective "fascinating" to them. The best criterion of a lecturer's acceptability to the lectured lies, after all, in the manner in which he rivets their attention and rouses their interest in the subject with which he is dealing. To judge from the opinions passed by his audiences at his first and subsequent lectures, Mr. Symonds' course should prove the most popular of all the morning lectures during the session.

One of the most interesting features of the introductory lecture was the promise to point out references for larger reading and the remarks about the history of the diseases which were dealt with. Historical medicine is a part of medical study that is entirely neglected. Our text-books tell us comparatively little about it, and, under the circumstances, it is not to be expected that they can tell us much. But in a lecture there is opportunity enough for referring to such points. To know who first described a disease, who first invented, used, or modified this or that instrument, devised or executed this or that operation, may not be of much use for examination purposes, but for the student who takes his surgery or medicine seriously it is of some importance. How greatly these little details add to the interest of the study of a particular disease, anyone who has perused the historical sketch prefixed to almost every chapter of Le Dentu et Delbet's System of Surgery (a work, by the way, which we should like to see on the library shelves) will readily understand. The ordinary student, however, cannot go to the larger works for these references, and Mr. Symonds' notes and points of information on such items will therefore be welcomed by all those who attend his lectures.

Dr. Mahomed's plea on behalf of Esperanto as the help-language for medical men is one which we should like to see endorsed by others before we venture a definite opinion upon it. There are, we believe, already some "Esperantists"—we trust the term is correct—among us, and it would be interesting to hear what their views are upon the subject. Of late years Esperanto has made great progress, and there are at present several papers, non-professional for the most part, published in that dialect. But we confess to a sneaking distrust of short cuts. The tendency to simplification and smoothness is not altogether a desirable one, and it is possible that the student who learns Esperanto, simply to save himself the trouble of acquiring a working knowledge of French or German, loses more than he gains. That this mixture is ever likely to supplant either of these two languages is very much to be doubted. We have heard it spoken, and—well, "Horonaim, Seons realm beyond, The flowery vale of Sibna," sounds far preferable to "Let me look at your tongue, please," in Esperanto. We have also seen it printed, and the paragraph had much the same appearance as a tyro's first attempt at type-setting, or the effort of one who endeavours to write a letter on a broken-down Yost. Still we are open to conviction, and if Dr. Mahomed cares to write a short exposition of the essentials of the new medium we shall be delighted to give it such publicity as the Gazette affords.

The first meeting of the Debating Society takes place to-night at eight o'clock in the Smoking-room. Dr. Savage, the President of the Society, will be in the chair, and Mr. H. O. Brookhouse, with the help of Mr. Neville Cox and such others of the audience as may for the sake of debate agree with him, will endeavour to prove that "England has now reached the Summit of her Greatness." Messrs. Fuller and R. Stout will oppose the motion to be submitted to the House, and t Secretaries will be glad to

welcome new men. The Debating Society has arranged a good programme for the session. On November 17th it will discuss "The Tendency of Modern Systems of Education towards Specialism;" on December 15th it will debate the pros. and cons. of Party Government; on January 19th it will follow the "Spectator" in criticising the "Continued attempts on the part of the State to Pauperise the Lower Classes;" on February 16th, which is to be the "Ladies' Night," it will soar into realms of the abstruse by confessing how greatly it is impressed with the truth, or fallacy, of the statement that Ignorance is Bliss; while on March 16th it will devote a whole evening to a discussion on Universal Peace. The subjects for debate have been well chosen, and should lead to animated and interesting interchange of opinions.

In our gradually increasing collection of old instruments and appliances in the museum show case there is as yet no representative of what used to be a familiar instrument in the operating theatre—the carbolic spray. One of these historic instruments is still to be found in Bright ward, and it is possible that there might be another specimen hidden away in some obscure corner of the hospital. The carbolic spray marked an epoch in our surgical history, and the proper resting-places for these out-of-date contrivances for disinfection is the museum. Nor do we possess one of those gigantic clinical thermometers to which Dr. Allbutt alluded. The specimen in the show-case is quite a useful and convenient sized one, and hardly gives one the impression of needing a carriage for its conveyance. If any old Guy's man has one of the original umbrella-like registering instruments to spare, we are sure the Curator will be glad to include it in the collection, for the benefit of the curious in later days. Meanwhile, we would suggest that the spray in Bright ward should be given a more prominent position than the one it occupies at present.

The report of the meeting of the Rifle Association shows that the energetic secretary of that flourishing constituent of the Clubs' Union has lost no time in taking up the proposal to form a miniature rifle club. We understand that the proposal has been received with cordial approval by the hospital and medical school authorities, and that no difficulties have arisen with regard to the site for the proposed range. The reasons which have induced the Rifle Association to fix upon the passage between the dissecting-room and the nurses' pavilion, in preference to the Honor Oak Park site, are fully set forth in Mr. Henderson's letter, and they are such that everyone will agree with the decision of the Association. It is unlikely that the Clubs' Union Committee will place any difficulties in the way now that the proposers have obtained the sanction of the Superintendent and the Dean for their undertaking, and we therefore look forward to seeing the details of the scheme which the secretary promises to submit in the next issue of the Gazette.

Change of Address.

Dr. A. R. Beaumont, from 32, Addiscombe Road, Croydon, to 3, South Park Hill Road, Croydon.

Dr. W. F. Box, from Guy's Hospital to "Berwyn," Warwick Road, Stratford-on-Avon.

Dr. J. A. Butler, from "Donnybrook," Addiscombe Road, Croydon, to 280, Goldhawk Road, Shepherd's Bush, W.

Dr. J. B. Copland, from Banks Terrace, Sheerness, to the Victoria Hospital for Children, Chelsea, S.W.

Dr. J. H. Donnell, from Park Hill, Disley, Cheshire, to 32, Bridge Street, Evesham, Worcestershire.

Dr. David Forsyth, from 24, St. Thomas's Street, to 19, Harley Street, W. Telephone No. 326 Mayfair.

Surgeon C. R. Nicholson, R.N., from Forton Barracks, Gosport, to H.M.S. *Egmont*, Malta.

Lieutenant-Colonel J. V. Salvage, R.A.M.C., from The Avenue, Andover, to 32, Thurlow Park Road, West Dulwich, S.E.

Lieutenant H. Watts, I.M.S., from Bunnu, Frontier Province, Punjab, to 9th Bhopal Infantry, Allahabad.

Dr. R. O. Williams, from Guy's Hospital to St. John's Hospital, Lewisham.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Pass List.

University of Durham.—Degree of Doctor in Medicine for Practitioners of Fifteen Years' Standing.—H. Joslen.

Introduction to the Lectures on Surgery.

[We are indebted to Mr. Symonds for permission to publish the following notes of the introduction to the lectures on surgery, delivered on October 5th.]

Gentlemen,—You are entering upon the study of surgery at a time of surpassing interest, at a time when many difficulties have been overcome and many new fields have been opened up. At present there are so many books on the subject, books so well written and so well arranged, that there is less necessity for systematic lectures than formerly. Then we depended on lectures principally. In the time of John Hunter, for instance, there existed no good English treatise on surgery. But lectures are still useful, and in this way—for the due appreciation of any disease you should have seen it and studied it personally; this, for you, is impossible in a great many instances, partly because you are not here long enough. You are here for a comparatively short time—a bare three years in the wards—and many diseases are rare, and will not come before you in the time you are here. Then, again, the multiplication of special hospitals withdraws many groups of maladies from the general hospitals, and diminishes our field in that way. Your duties as dressers, again, limit your opportunities of seeing cases in other wards, outside those with which you are more particularly connected, and in many other ways your field is narrowed by the necessities of the conditions under which you study.

Again, your text-books must necessarily be of moderate compass, for there is no time for you to read large treatises. Even two large volumes are insufficient to contain more than a moderate account of all the surgical affections. And to supplement such a text-book, you must know where to go for further reading, and to do this you must have some guidance. You will find that the whole time devoted to surgery is too short. You will find that the text-books, good as they are, must deal chiefly with the common diseases and injuries, and can pay but brief attention to the less common maladies. Yet you will encounter these rarer diseases, and it is necessary, therefore, that you should recognise them, and know how to deal with them when you meet them.

The object of my lectures will be to deal as fully as is possible with some of the less common maladies, and I will endeavour to give you a clear idea of such conditions by illustrations, by exhibiting to you living examples, in the cases of such patients as may be available for that purpose, and by selected museum specimens carrying good clinical histories. I will also refer those of you who may wish to read up the various points, to the fuller printed accounts of some of these maladies, so that you will be able to amplify your text-books. Finally, I will refer you to the specimens in our museum, illustrating the subjects discussed, selecting the most important, and giving you a brief account of each. It is almost impossible for you, in the short time at your disposal, to work through all the fine specimens we possess in our museum, but by selecting the most typical and important of such specimens and drawing your attention to the most striking features which they exhibit, I may be able to help you, so that if you note these points you will possess illustrations of diseases which you may not see in the living subject. For, in short, to acquire anything like a real knowledge of diseases you ought to possess an example, noted by yourself, of every variety, and when you have been unable to note down such an example in the living subject, you must seek for it in the museum or in a book illustration. Your time for study, as I have already said, is all too short, as you will find later on. My advice to you is to begin at once the collection of examples of disease, just as you may have made a collection of butterflies, or birds, or fossils in early life. It is by personal observation that you will acquire the knowledge that will prove of the greatest value to you later on, and I have noted that those of you who come to the hospital with some knowledge of natural history, and who have had some training in personally observing matters, generally get on and find their habit of such observation of the greatest value to them in the wards.

As to text-books, there are many good books which you may study, and you will do well to get a reliable text-book as soon as possible. One of the best of these is Walsham's Surgery, especially the newer editions edited by Mr. Spencer. You cannot get a better book than that. Rose and Carless, too, is another good book, and the work of Miles and Thompson, published by an Edinburgh firm, is an excellent little manual. But you will usefully supplement your text-books by reading larger works in the library, and of these there is none better than a work to which I am continually referring my dressers. I allude to Mr. Hutchinson's excellent "Illustrations of Clinical Surgery," in two volumes, which I

should advise all of you to read, for it will give you the best descriptions of many of the rarer varieties of diseases with which you should be familiar. Let me also advise you to read up in your text-book the subject for each lecture. You will then know something of it before you come, and I hope you will see that a lecture designed on the lines I have sketched out may be of value and worth attending.

Aim at accuracy. Get into the habit of systematically examining your cases and noting down the various points which are of importance. I cannot too greatly impress upon you the value of accuracy in your descriptions and in your work generally. I often find, when I ask a senior man if he has seen a fracture of the thigh, for instance, that he has overlooked certain definite and important points. He has seen it, but when I press him to explain how it happened, in what part of the bone the fracture was, whether transverse or oblique, and what kind of union resulted, he is often in difficulties, and yet he has seen it all.

Look at the list of injuries and diseases in the Surgical Register index for any year, to which all of you must refer as ward clerks, and you will be amazed, even when you are qualified, at the number of diseases you have not seen and yet might have seen.

Do not put off noting examples of disease simply because you are not yet a dresser. There is a sort of belief that when that time comes, knowledge will be absorbed rapidly out of the abundance of material around you, so that reading and note-taking will be quite unnecessary. But you will find how little you really will see, for your own field is small, and how much your time will be occupied by practical duties. Therefore, begin at once to note in a book examples of every malady you come across. When you come across a better example you can take that, and so bring to your reading a personal knowledge of as many diseases as possible. Then to increase your knowledge go out of your own ward and see cases in other wards. I would very much like to see an association of dressers formed, and the ward clerks and dressers in each "firm" take one another into their various wards and show them their different cases. I hardly think there can be a better way than that in which you can concentrate for your own advantage the great clinical field that lies before you. At "Out-Patients" you will see much disease, and here you can attend freely. I advise you to be a familiar spirit there as early as you can. An hour or two a week, spent in this way, even while you are still reading anatomy and physiology, will be very well spent, and still more valuable will such visits be when you are ward clerks.

In fine, gentlemen, see as much of disease as you possibly can; write down a description of the points exhibited, and do not be satisfied until in your text-book you have a reference to a living example or a specimen of every malady. In no other way can you obtain a sound knowledge of your subject. Buy a text-book at once and look up each disease as you see it, for even in your very earliest days you will find this is of value and interest.

Mr. Symonds will deal with diseases of the oval cavity, the accessory sinuses of the nose, the pharynx, œsophagus and stomach, in his course of lectures during the present session.

Pupils' Physical Society.

The Opening Meeting and Dinner.

The opening meeting of the Guy's Hospital Pupils' Physical Society took place on Saturday last, the 13th instant. Previous to the meeting a dinner was held in the College Hall. Mr. Cosmo Bonsor, Treasurer to the Hospital, occupied the chair, with Professor Clifford Allbutt, F.R.S., the guest of the evening, on his right, and Sir Samuel Wilks, the Senior Consulting Physician, on his left. Amongst those who attended the dinner were Dr. Pavy, Prof. Groves, F.R.S., Mr. Clement Lucas, Dr. Taylor, Dr. Horrocks, Mr. Lane, Dr. Hale White, Mr. Dunn, Dr. Shaw, Dr. Craig, and other members of the medical and surgical staffs. There were no speeches. The Chairman, in proposing the health of His Majesty the King, Patron of the Hospital, briefly referred to the conditions under which the new term was commencing, and cordially welcomed the newcomers.

At a quarter past eight an adjournment was made to the Physiological Theatre, which was well filled, many of those who were prevented from turning up at the dinner being present in the theatre to hear Professor Allbutt. Sir Samuel Wilks took the chair, and called upon Dr. Allbutt to address the meeting. The Professor, who on rising was received with prolonged applause, then read his paper on "Words and Things," which we hope to publish in full in the next issue.

The Chairman said he supposed the burden of the Professor's address was that when words were used they should be carefully chosen, and that the really important matter was the thing spoken of. His own wish would be to hear where words came from, but that would require half a dozen lectures. His difficulty was that words were constantly changing in meaning. An illustration of this was the following:—He had a case of hysteria, the girl having been bedridden two or three

years. She rapidly recovered when she came to the hospital by the negative treatment of depriving her of home sympathy. He told the girl she must get something to do, and that she went to bed simply because she had no occupation; and he asked her to come to his house and report what she had done. She brought some worsted articles, and he asked her whether she made them herself, and her reply was, "I assure you they were made by hand, and not manufactured." That girl was using the word in the opposite sense to that conveyed by its root. As years went on one found the meanings of words undergoing change. He hoped the Professor would come again, and lecture on the origins of words. Some of the vulgarisms heard in the Out-patient department were very expressive; such as "squench the thirst," and "worrited by the baby." Scientific words often presented a greater difficulty still, except those of chemistry, which, however long, were really simple, and were expressive of what they were applied to. In pathology many names suggested that finality had been reached, whereas that was not so. But when one spoke of small-pox it was clear what was meant. Bright's disease was, by many, called desquamative nephritis, and if it were found not to be so it was simply called "non-desquamative." Again, Dr. Addison, in 1830, lectured on "Typhlitis" and "Perityphlitis," and said it was a common disease. Yet some thought the disease was discovered only a few years ago, and named it "appendicitis." In the *British Medical Journal* the other day he saw that a man thought he had a case of appendicitis. He operated upon it, and it was not, so he called it pseudo-appendicitis. (Much laughter.) He had seen the name pseudo-posterior sclerosis applied to a case because the patient did not die after the name posterior sclerosis had been given to the condition. If a very definite name were given to a particular disease it might have a tendency to stop investigation in regard to it. He agreed with the advice of the Professor that one should guard against being led away by a name. He had the greatest pleasure in proposing a vote of thanks to Professor Allbutt for his most interesting lecture. He had known the Professor almost from the commencement of his career, and when he was practising in the Midland counties he got a great name, and was esteemed by everybody. On turning over some notes the other day, he (Sir Samuel), found that he communicated with the Professor as long ago as in 1863. It would be insulting to the Professor and to his audience to speak in detail of his work, which seemed to have been founded on the motto, "Follow your profession, and do so on a true scientific basis." Everyone knew what works the Professor had written, and what he had edited, and he (the Chairman) had been told that the last edition of the "System of Medicine" was the best book published on medicine in England. It had been a great pleasure to him to be present that night to greet an old friend, and he had no doubt warm thanks would be accorded for the most interesting address.

Dr. Frederick Taylor, in seconding the motion of thanks to Professor Allbutt, said he would not attempt to go so far back as Sir Samuel Wilks had done. There was one thing for which he was supremely grateful to Dr. Allbutt. It was many years ago now since the latter had improved and modified the clinical thermometer, and he (Dr. Taylor) remembered what a boon the improvement had been. It was true Dr. Allbutt's pocket thermometer had been about six inches in length, but for all that it was a great improvement upon the unwieldy instruments of earlier date.

The vote of thanks having been carried by acclamation, Professor Allbutt responded in a few words, referring to his experiences with the old clinical thermometer—an instrument as big as an umbrella—and to his attempts to improve upon it. An adjournment was then made to the library and museum buildings to inspect the usual collection of instruments and appliances, and partake of coffee and biscuits.

Guy's Physiological Society.

The Annual General Meeting of the Physiological Society was held on October 15th, 1906. The annual report and balance-sheet were read and adopted.

The following officers were elected for the ensuing year:—Vice-Presidents: Dr. Spriggs, Dr. Forsyth, Dr. Beddard, Dr. Hertz, Mr. Cameron, and Mr. Mollison. Secretary: W. L. Hibbert. Committee: R. A. Rankine, C. H. Crump, K. Leavey, G. H. Peall, and J. L. Johnston.

Dr. Pembrey, who was unanimously re-elected President, said it had always been a great pleasure to him to be connected actively with the Physiological Society. His work and responsibility had been considerably lightened by the co-operation he had received from the members. He paid especial tribute to the excellent way in which the retiring secretary, Mr. R. A. Rankine, had carried out his duties in the past year.

In connection with the "Stitch" Committee, Dr. Pembrey stated that a certain number of investigations had already been made. Up to the present sufficient evidence had not been obtained from which conclusions might be drawn. He asked if the Society wished to continue the work. It was decided to continue the work, the Stitch Committee to consider the question of drawing up an interim report to be presented at a future meeting. The meeting closed with a vote of thanks to Dr. Pembrey for occupying the chair.

W. L. HIBBERT (Hon. Sec. and Treasurer).

Papers by Guy's Men.

On Pneumococcal Infection during Early Life. By Henry Ashby, M.D., F.R.C.P. Lond.—*British Medical Journal*, October 13th, 1906.

A Case of *Post-mortem* Cæsarian Section. By J. Duncan Howe, M.R.C.S. Eng.—*Ibid.*, October 6th, 1906.

The Future of the London Medical Schools.

On reading through the reports of the introductory speeches of the various Metropolitan Medical Schools, delivered at the opening of the winter session, one cannot fail to be struck by the spirit of advertisement which pervades the majority of them.

I have read through nine summaries in all, of nine different hospitals, and the predominant note in each is that of excellence of their own particular school of teaching; of their brilliant record in the past, and of their hope to excel, or at all events equal, their former exploits in the future, intermingled with which—this is a jarring note—there is evidently a fear on the part of some of the speakers that all is not as it should be, and that unless things alter, in the future there is going to be no school at all.

What is the cause of this state of things? There is no doubt it arises mainly from, firstly, the competition of the Provincial schools, which are coming more to the front, and secondly, from the unwise and unprofitable competition of the London schools, one with another.

I, personally, have been a student both in the Provinces and in the Metropolis. What was the condition one found in the Provinces? Better social conditions for the student to live in; better supervision, both in regard to the authorities and to the nearer proximity in many cases to home; better opportunities of recreation, and—I speak now of the Preliminary subjects of the medical curriculum—*very much better* teaching. Consider the condition of the medical student in London, who comes, perhaps, from the Colonies, perhaps from the Provinces; he has no friends at first, his lodgings are with an unsympathetic landlady, probably several miles away from his medical school; if he is ill, not a soul comes near him—I speak from bitter experience; his friends come up to him when he is supposed to be dying; his spare time is largely occupied in an hour's journey backwards and forwards to his hospital. His pleasures, then, have to be taken out in, say, an hour in the Gymnasium in the polluted air round a hospital, or in his game of football or cricket, to which he has to make a considerable journey in most cases; and his evenings often spent in the unhealthy atmosphere of a music-hall.

What have we in the case of the student at a Provincial centre? In many cases a house to live in, or to go to, within a reasonable distance, together with all that home supervision means, recreation amongst his own friends, his evenings spent at home with his family. Can we put anything against this? It may be urged that the habit of self-reliance and "the knowledge of the world," acquired by being free from leading strings, are worth all the disadvantages; but I have known many a man whose future career has been spoiled by the want of efficient supervision at a critical period of life.

The last class of students to whom this does not apply are those who have homes in London, or to whom London is the only available centre. What is the remedy for this state of affairs? Firstly, the recognition on the part of the staffs of the London hospitals that their day as sole purveyors of medical education has passed away, that in the future they will have to face the competition more and more of the Provincial medical schools and universities, just the same as they will have in their consulting work. Secondly, a combination—a real one—amongst the various medical schools, to refrain from the present unhealthy desire to rush up expensive laboratories, lecture theatres and the like to attract students from other schools. Let them bear in mind that the students do not come to London now, and never will again, in the manner they did twenty years ago. Thirdly, to follow the example of the Provincial universities and select men who are specially qualified, and able to teach the subject they are supposed to do, and by means of combination amongst themselves, assure the teachers of a living wage, so that they will not be hampered in working at the particular subject in which they have an interest.

Then comes the point that in the preliminary subjects the schools cannot afford individually to pay a man sufficient to allow him to devote himself to one particular subject. The idea has been mooted of having one central institution for this. It would not seem to be feasible, on account of the wide area the London students live in for them to attend one particular place, but let it be agreed upon amongst the different hospitals not to try by elaborate expenditure what they cannot afford, to attract other hospitals' students, but that where the buildings are already in existence, that there the teachers be appointed whatever school they may belong to. Thus by having, say, three centres for teaching one particular subject, a host of indifferent teachers might be eliminated, and those who have shown their capacity for

teaching might be given a living sufficient to free them from anxiety.

Let it not be thought that I am referring in these remarks to Clinical work at the various hospitals; I am referring to the work of the schools as confined to practically the teaching of the subjects which are learnt outside the wards, in which I include pathology in its various aspects.

As to the broader subjects of medicine and surgery, it is to the advantage of students to visit as many hospitals as possible, and I should look upon it as the greatest calamity to the profession that could happen, if one or two hospitals should attract all the students so that they should all get into the same groove, and the same way of thinking. When students get out into the world they find that there are many ideas that are presented to them by men of other schools that are just as worthy of consideration as those that have been presented to them at their own hospital. And this is where I think the Provincial schools fail, and will ever fail, in competition with the London schools, that from the circumstances of the case, the students are necessarily grounded in the beliefs of one set of men, instead of being able to weigh up the opinions of several series of thinkers. I would urge upon the London medical student not to be content with simply attending his own hospital, but to see the work that is done at other hospitals, and there, again, I think it is a duty that men of other London hospitals should be welcomed, without fee, at each and every London hospital. As regards men coming from the Provinces or Colonies to complete their medical education, it is a different matter; they ought to contribute.

From the Gazette's Special Pathologist.

NOTICES.

F. T. M., Charlbury.—Tubercle bacilli are present in fair numbers in this specimen.

T. W. S., Falkingham.—There is only a trace of albumen in this urine. The centrifugalised deposit is only moderate in amount. It contains mucin and the usual squamous cells, together with some stellar and amorphous, and a very few triple phosphates. There are also bacteria bringing about alkaline decomposition of the urine. There are no tube casts, pus or blood, and tubercle bacilli are not present in films.

PATHOLOGIST.

Correspondence.

To the Editor of Guy's Hospital Gazette.

The Cobham Cat.

Dear Sir,—I venture to submit two hypotheses to account for the preservation in churches of mummified cats holding their prey in their teeth.

The first was made to me by a friend, namely, that it was kept as a solemn warning to other mice and rats as to what fate awaited them if they impiously frequented churches. The second I evolved out of my inner consciousness, thus: Conceive of a time when books were few, newspapers non-existent, and paintings rare, being chiefly in this country portraits or commissioned historical or allegorical subjects, *e.g.*, Henry VIII. presenting the charter of R.C.P. But the desire to say something to all men by means of a work of your hands is old. In Christchurch Priory there are figures carved on the choir stalls of a fox dressed up as a priest, and similar quaint conceits. In Sherborne there are punning coats of arms carved on the bosses of clerestory arches, representing the names of abbots, etc. In Reading, where "Summer is a coming in," was set to music—the earliest known example of the round or canon—there exists, I believe, a contemporary document in which a jocular reference is made to it, something to the effect, "And don't offer canons to canons," only expressed in Latin. In missals we hear of little snips of contemporary gossip or criticism embroidered in among more serious matter. In the course of a short visit to the Continent I looked over a mediæval house at Rüdesheim. There were mural paintings in the chief rooms. A chapel opened from one such; over the entry the artist had painted either a cat or a tiger behind bars. Why? I suggest to express this parable, "Ye have all a devil in your minds. Keep it locked in. Starve it! Pray brothers!" Again, I can fancy the mediæval priest saying, "Avoid the world. Stick to the church so shall you be safe. Satan is prowling about on the look-out for your souls. See brothers. He is like this cat. Where'er you go; In the street, in the house, in the lane, in the woods even, he is constantly searching his prey, and once he finds you.—No hope. No escape. Satan will let you run a little way. You think you are free. It is not so; he will have you. Those sharp claws; that remorseless jaw. Go not into the world, brothers. Pray! pray! Fast! Abstain from godless conversation! Work!"—I remain, Sir, yours faithfully,

GEORGE MAHOMED.

Astolat, Bournemouth.

Dear Sir,—On reading your remarks in "Passim" with regard to the "Cobham Cat" in the last issue, I venture to relate another instance of a recently-discovered mummified cat in Leeds. At the commencement of this year the old church of St. Paul, Park Square, was

in the process of being pulled down, and one of our household passing by one morning in March saw the workmen examining the skeleton of a cat which they had found in a blocked-up chamber near the top of one of the walls they were about to rase to the ground. On questioning these workmen, they replied that the cat must have trespassed on the church precincts at the time it was being built, and having gone to sleep on this wall must have been entrapped either by accident or design on the part of the builders, who completely bricked up this chamber. This church of St. Paul was built in 1791–3, and therefore we may presume that the cat was there for 113 years !

In this case there was neither rat nor mouse, and the cat seems to have been in a position of rest. I am endeavouring to trace and gain possession of the specimen, as its value has been considerably enhanced in my eyes through reading Dr. Theodore Fisher's article and the recent correspondence.

Yours very truly,

A. ALAN FORTY.

26, Park Square, Leeds, 10th October, 1906.

Notices.

Dear Sir,—You would be doing many men a small kindness if you could, in your columns, draw the attention of the various secretaries to the numerous ancient notices on their respective notice-boards. The complaint is frequently made that an important notice has been missed owing to the fact that it was surrounded by others long out of date ; and now that the new session is beginning, it is surely a reasonable time to consign rubbish to the waste-paper basket and start afresh. At the present moment there are two notices of dinners for December, 1905, and March, 1906, respectively ; a medical school notice of a special lecture on August 11th ; and two notices of the Students' Club, one announcing a general meeting on March 16th, and the other suspending a member in February, 1901 !

These are only some more glaring instances, and surely they might be removed and cease to be an eyesore to men in search of knowledge.—Yours sincerely,

October 3, 1906. ONLOOKER.

A Plea for Esperanto.

Dear Sir,—I read in "Passim" of Dr. Osler's advice to students to study French and German, and your remark that this advice "deserves wider attention than it has so far received." The said advice has been given before, and we all know that to get a proper grasp of any subject that has been written about it is necessary to read the original authors. But how many of us can really do this ? For my part, I have just waded through "Femmes en Couches et Nouveau-nés," but this is written in a very easy style. I certainly could not look at any scientific work in German, and, Sir, I believe that there are others of my colleagues with me. To learn to read French and German well is advice which ought to be taken, but although many may be *willing to take it*, few, I think, will *carry it out* on account of the difficulty to Englishmen in mastering the pronunciation, inflexions, and irregularities of these languages. Moreover, to learn one properly is bad enough, but two ! ! Then what about the other European languages ?

But, Sir, there is a language which will, I think, supplant in time both French and German for scientific purposes, and that language is Esperanto, the international common language (or, as it is also called, the Help-language), which was created by Dr. L. Zamenhof, of Warsaw, himself a medical man. This language is characterised by its internationality, invariable pronunciation, phonetic spelling, scientific precision, together with great flexibility, and last, but not least, by a grammar simplified to the utmost and learnable in one hour.

I have been about the same time as most Englishmen trying to learn French and German, and can read and speak them with a facility or otherwise equal to the average acquirement ; but after a few months casual study I can read any book in Esperanto with pleasure, and on my holiday I talked frequently with Frenchmen, Germans, and Spaniards, quite satisfactorily, if not fluently.

The possibilities of Esperanto are immense. It ought to bring even the rank and file of us into touch with all foreign work by means of original writings which would need no translation, and also it should enable us very shortly to communicate personally and directly with medical men or students connected with any hospital or institution in Europe.

If any of your readers who are unacquainted with Esperanto wish for information in connection with this interesting and enticing language, I shall be very glad to give it on demand.

Till having finished this letter I had not read the excellent paper by Dr. Arthur F. Hertz, on "Aspects of German Medicine," in your October number, but the first paragraph forms a striking commentary on what I have just written.—I am, yours truly,

C. J. FULLER.

33, Nightingale Place, Woolwich.

A Miniature Rifle Club.

Dear Sir,—With reference to your note at the foot of Mr. Howe l's letter in the last Gazette, may I draw attention to the account of the General Meeting of the Rifle Association held on Tuesday last, and at the same time more fully state the Committee's reasons for the proposal put before the meeting. In view of the fact that during the past year the Association has been making up for lost ground, it would be impossible, or at any rate unwise, to try to set up two ranges, one at Honor Oak and one at the Hospital. It therefore remained to decide which site to propose to the meeting.

Our reasons for choosing the one we have done were many, but the chief among them were following :—

1. The difficulty of obtaining sufficient space at Honor Oak for the Butts.

2. The objections which would undoubtedly be raised by the surrounding householders.

3. The delay, etc., entailed in obtaining permission from the local authorities.

4. The much greater expense that it would entail.

5. The possibility that perhaps men would not appreciate miniature shooting, in which case a large outlay would have been made to no end.

The points in favour of the Hospital site were :—

1. It was ready to hand.

2. The only objectors could be the Superintendent and the Dean, both of whom are in sympathy with the scheme.

3. The trifling cost which is necessary to start the range.

4. Its greater accessibility.

Before anything definite can be done, the proposal must be submitted to the Council of the Clubs' Union, and this has been done. I hope to be able, should the Council approve, to let you have a statement of the estimated cost, for publication in your next issue.—I am, etc.,

HAL J. HENDERSON, Hon. Sec. G.H.R.C.

October 17th, 1906.

Wanted—An Explanation.

Dear Mr. Editor,—A patient drew my attention to-day to the enclosed, and asked me to explain. I regret to say I could not. Do you think an explanation in the Gazette might be of interest to your readers? Yours faithfully,

T. R. ATKINSON.

Chadwell Heath, Essex.
October 9th, 1906.

Enclosure.—*Daily Express*, October 9th, 1906.

SIGHT RESTORED BY FALL.

One Accident Dispels Effect of Another.

strange case of sight which was destroyed by one accident being restored by another was reported from Leeds yesterday.

practical joke was played on Miss Maria Louisa Goodyear, of Headingley, while she was employed as a machinist at Hunslet, twenty-two years ago. Her stool was withdrawn by a fellow-worker from its usual place, and Miss Goodyear fell and struck her head. The force of the blow caused pressure of the skull on the optic nerve, and she lost her sight. Twelve years later she fell from the top to the bottom of the cellar steps. The medical man who was called in said that she had shaken the optic nerve, and declared that if he could give her a blow on the head her sight might be restored. He dared not try the experiment, however, as it might jeopardise her reason. Now Miss Goodyear has fallen down a flight of stairs again. The fall was followed by severe pains in the head, and the sudden return of her sight just in time to see her mother before she died.

Miss Goodyear's sight is excellent once more, and she has no need for spectacles.

[We are afraid that an explanation, both of the facts (?) and the grammar of the cutting, is beyond us.—Ed.]

United Hospitals' Hare and Hounds.

Dear Sir,—I would like to draw the attention of would-be cross-country runners to the facilities offered by the above club for members. Guy's is affiliated, and all members of Guy's Clubs' Union are eligible to run at Blackheath from the "Green Man" with the Blackheath Harriers every Saturday afternoon, going out with fast or slow packs, according to choice. I shall be pleased to give any information regarding runs, matches, concerts, &c., and hope some Guy's men will join us when opportunity occurs.—Yours truly,

W. H. WATSON.

Notice.

GUY'S HOSPITAL CLUBS' UNION.

Alteration of Rule.

At a meeting of the Clubs' Union Council held on Monday, 9th July, 1906, the following Resolution was passed :—

> "That the Reports be included as a Constituent Institution of the Clubs' Union, on the basis that of every three guinea subscription paid by an Annua Subscriber, and out of every 12s. 6d. subscription to the Gazette and Reports paid by a Life Member, a sum of 5s. be allotted to the Reports Fund, and a free copy of the Reports be offered to each Subscriber."

To become a law, this Resolution has to be confirmed at a meeting of the Clubs' Union not earlier than fourteen days from this date.

R. P. ROWLANDS,
Hon. Sec. Guy's Hospital Clubs' Union.

The Committee for the Study of Special Diseases announce that Mr. G. W. Nicholson, M.A., B.C., of Jesus College, Cambridge, and Guy's Hospital, London, has been appointed to the R. C. Brown Scholarship in Special Pathology.

A Case of Spinal Injury.

CLINICAL LECTURE BY Mr. GOLDING-BIRD.
October 3rd, 1906.

Gentlemen, — When I came down to the hospital the other day I was greeted with the statement that there was a case of fractured spine in my ward. I did not make any remark, and I did not ask any questions, because I did not know what was meant. I do not know what the symptoms are of a fractured pelvis either. You might just as well ask me what are the symptoms of a bull in a china shop. If I were an admirer of old Chelsea, I should be sorry for the china; if I were a humanitarian, I should be sorry for the old woman that kept the shop, because she got gored by the bull. And, if I may speak of my recollection of my student days, I would say the two questions which I most hated to be asked were: "What are the symptoms of fractured spine?" and, "What are the symptoms of fractured pelvis?" There is no possible answer, because the pelvis is a bag of tricks, and any number of things may come out when you open it. Any symptom may be the prominent one in a case of injury, according to the organ involved, and the same is true of the spine. The spine itself is only bone; it is what is contained in the spinal canal and in the parts around that generally gives the interest and the prominent line of symptoms.

But I want to put before you to-day the way in which I approach a case of fracture of the spine, and what thoughts are in my mind; also how I try to arrive at a conclusion on a case. It is of no use approaching a case of fractured spine unless you are prepared to bring to it some anatomical and physiological recollections. I have seen a woman who died apparently from a fractured spine; there was the usual accident and everything else, but nothing could be felt in her back. Yet she was paralysed, and died like any other case of fractured spine would. Nothing was found post-mortem. You may therefore conclude from certain symptoms that a spine is broken, and yet it may not be broken.

I want you to bear with me while I go over certain principles from an anatomical and physiological point of view. But I must exclude the occipito-axoid region; our concern will be with the rest of the spine, from the third vertebra downwards.

First, is anything likely to happen to any part of the spine from the way in which the bones are arranged? The cervical region is capable of considerable flexion; it is the most flexible part of the spine. So you may say it surely ought to be free from so-called fracture, or fracture-dislocation. I admit it is so; but it is subject to a peculiar kind of accident, namely, over-flexion, the chin being driven downwards on to the chest. When that happens, a peculiar kind of accident is brought about, which affects the spinal cord in a special way, as we shall see by-and-by. When I learn that I am to see a case of fractured spine in the neck, I think at once whether it is possibly one of injury from over-flexion rather than fracture.

When I saw this man at the bedside, I was told he had fallen from a horse, and the horse had rolled on him. He said he had been kicked in the back; and my attention was drawn to the fact that he had great pain in his arms and in the root of the neck; and I wondered whether it was a case of injury such as would result from the kick of a horse. But on questioning, the man was not sure that the horse had kicked him, and there was no bruise. He said he remembered that he fell doubled up, with his chin down, and this suggested that it was either hæmatomyelia, or a case in which, under undue flexion, the ligaments were torn between the spinous processes, whereby one vertebra was separated or dislocated from the other. Under sufficient strain, the inter-vertebral discs can be torn asunder; or there may be fragments of bone torn off, with consequent damage to the cord. I found the seat of his trouble was between the first and second dorsal vertebræ, and that his supra-spinous ligament was torn through, so that the finger could be put between the two vertebral spines; and with such objective damage, my experience made me negative the idea of hæmatomyelia or mere punctate hæmorrhage, and conclude that his cord was crushed.

Now bring your thoughts to the dorsal spine—a fairly fixed region—fixed by the way the vertebræ interlock and by the ribs; so that is a part which is likely to break rather than bend. It is true the lumbar region is flexible, in a sense, but I never saw in the lumbar region an overstrained effect, as in the root of the neck; and surgically we may consider the dorsal and lumbar spines as suffering from accident in identically the same way. If a man drives under an archway and gets his head forced down on his chest, or turns a somersault on the hunting field, he will suffer from overstrain in the neck; but the kind of injury which happens in the dorsilumbar region is generally from a fall, either on the feet or on

the buttocks, or from a blow, and the result is very clear and constant. He gets a so-called fracture-dislocation; *i.e.*, he shoots the upper part of his spine over the lower part, and produces the scissor effect, dividing or crushing his cord in two. When you see a case of this kind you may know it is useless to do anything operatively, except where the blow has merely depressed the laminæ; an occasional but rare accident.

The result of extreme flexion of the cervical bony spine may cause the vertebræ to jump the one over the other. You recollect how that the lower articular processes in one vertebra overlap the upper on the next one below; well, extreme flexion may cause one or both of the lower articular processes of the upper bone to jump in front of the upper in the vertebra below, and hence, by advancing, in a moderate degree, the upper vertebra on the one beneath, narrow the spinal canal and cause pressure. Such an accident should be always thought of in this region, and finding the spinous processes out of line, and even—in thin patients—undue advancement of one or both transverse processes of a vertebra, will give the clue to the condition. Here is such a specimen from our museum; and post-mortem reduction has been effected by flexion and extension in the flexed position. In life, such a case may, with less risk of further damage, be reduced by open operation, and with the hope of relieving the compression of the cord.

Again, in fractured spine, not only is the cord damaged, but also the nerves at their emergence: and a study of peripheral pains will help to the exact location of the cord injury. Now the nerves that emerge being tougher than the spinal marrow, suffer a great deal less; and there may be extreme pain and bands of hyperæsthesia and local palsies, due to pressure on the roots of the nerves, showing that they still retain function, while the spinal cord itself may be seriously damaged below. This man, for instance, had, for a long time, what he described as neuralgia in his arms; otherwise they were all right; that is to say, he could move them, and has done so ever since his accident, and at present (eight months from his accident), whilst he still is paraplegic, his arms have long ceased to give him pain.

Speaking of direct or local injury, you must remember that should he fall across an edge or bar, the patient may break a spinous process, or separate two spinous processes, and tear the spine asunder; or he may depress the laminæ; but since when he falls it is generally from a height, the momentum usually causes fracture-dislocation. It is different if a man is struck in the back with an iron bar. If you know the man has been kicked by a horse, or been hit with a bar across his back, it is probably a case which operation will benefit. He may have any of the bone injuries above mentioned, but the crush will be less. I remember a woman, whose case I will subsequently relate, who simply fell on the edge of the stairs, and she had broken the laminæ of one of the dorsal vertebræ, and the fragment had been driven on to her spinal marrow. We were able to cure her by operation, but such cases are rare. When, therefore, our present patient told me he had been kicked by a horse, I thought he surely ought to have been operated on at first; but on examining him, and sifting his history, I felt certain it was not a case of a crush, but severe and, I fear, fracture-dislocation.

Now, what is inside the spinal canal, from a clinical aspect? Do you ever appreciate what a desperately loose fit it is between the dura mater and the spinal canal, and even between the cord and the dura mater? This is doubtless to allow of freedom of movement, but it is also a wonderful safeguard against injury; otherwise, in jumping, or coming down with considerable concussion, the cord would be quickly injured. The dura mater hanging from the upper cervical vertebræ is exactly like a loose snake's skin, and comes down to a very fine point below, where it is attached to the posterior common ligament. Outside the dura mater are the large veins which come out of the bodies of the vertebræ, and form their plexuses there, so that extra-dural hæmorrhage may occur in that situation. Inside the dura mater there is a very wide space—the subarachnoid—before you come to the spinal cord. What steadies the spinal cord in its place? It is mainly kept steady by the ligamentum denticulatum and by the way the roots of the nerves comes out.

In every way, you see, is great provision for a wonderful flexibility of the spine and its contents; yet, if the spine is severely over-flexed, not only may injury by tearing affect the ligaments, bones and extra-dural veins, but even the cord itself—at least at the root of the neck—may suffer in a peculiar fashion without external mark. For on hyperflexion of the lower cervical region, without any evident external signs of injury, there may occur a hæmorrhage, that is, a dotted punctiform one in the grey matter, and the condition is known as hæmatomyelia. It gives rise to a special train of symptoms that I hope to detail to you subsequently.

Again, is the amount of injury which you feel a true measure of the deeper damage which has been done? It is not. I have already mentioned the case of a woman in whom nothing was felt or seen, or even found post-mortem, and yet she died of every subjective symptom of spinal fracture. It is mainly experience which can help you. There is so little to be felt in our present case that if I were to ask you to pass your hand down to ascertain what it is you might well miss it. Yet there was a tearing of the supraspinous ligament, which I do not think had been noticed before I saw him. With separation of the two upper dorsal spines, and feeling so little you might well think that this is not after all a very bad case. But you would be wrong. Never give a favourable opinion in a fractured spine just because you do not find much objective injury. The deep bone displacement you can only conjecture, whilst still deeper injuries to soft parts you probably have only subjective symptoms to show The wisest and truest position to take up is to give a very guarded prognosis in every case of spinal injury. In judging of the part of the cord that has been hurt, from what you can feel, you have to remember that the levels of the spines of the dorsal vertebræ are not those of the corresponding bodies. In the dorsal region, the seventh dorsal spine will overhang the eighth body, whilst the level of nerve emergence may be even three vertebræ from the spinal segment of origin. Another thing which puzzles men is this: Thinking of medical paraplegia you expect to see a man completely paralysed below a certain point. But we get such queer things in accidents. A man may have patches of sensation, and local movements in certain groups of muscles, and all the rest may be paralysed. The distribution of paralysis and of pain seems so irregular, especially in moderate cases of crush, that only a very studied review of the nerves in their distribution and point of origin from the cord will clear the matter up. This remark applies especially to injuries in the lower dorsal and upper lumbar regions, where the cord is terminating, but there is the big leash of the corda equina. The symptoms following damage here are largely those of hurt peripheral nerves; and what is more curious is this, that here the nerves may be hurt before they have united to make a mixed nerve, and the motor and sensory roots may be hurt independently, giving still more obscure peripheral indications in "patchy" anæsthesia: and in a motor paresis corresponding to one segmental level, whilst the afferent nerves of the same level may be unaffected.

On first seeing a case of spinal fracture you must not jump to the conclusion that any paraplegia present is complete. A few hours after the accident, in many cases, you will be able to see that the paralysis is not quite complete. If however, after a day or so, this is not so, you must conclude that there is complete destruction of the cord, and certainly operative measures are not likely to do any good. If the paralysis is incomplete, it shows that the damage to spinal marrow is partial; but here again you must not necessarily conclude that the prognosis is good on that account, because a traumatic myelitis may be set up in the course of convalescence, and the patient becomes completely paraplegic and eventually dies. Indeed, I really do not think this distinction between complete and incomplete is of much value to you. A few hours after the patient comes in the paralysis may be better; but it may then slowly become worse, and in a few days may be complete. The chances are that, there being an ingravescent form of paraplegia, there is hæmorrhage added to it, the kind of condition which, from a clinical point of view, you would think lent itself to operation. So it does; but the result may yet be very disappointing, since the spinal lesion, apart from the hæmorrhage, may be in the end irremediable. Of the symptomatic value of the reflexes there are various opinions; but broadly to the surgeon it comes to this: if there is a case of fractured spine with paraplegia and total absence of all reflexes after the third day, you will conclude that the case is one of complete division of the spine, and the end of the case is only a question of time. If it is incomplete, the patient will probably have his reflexes return, even before he can himself show evidence that the paralysis is not complete. If you can elicit his reflexes soon after the accident, there may be hope that the spinal marrow is not completely divided, and in a day or two he may feel a little, and may even be able to move certain groups of muscles. Bastian laid it down long ago that if in spinal fracture there was complete absence of all reflexes, it was a hopeless case; but that if the reflexes came back, the cord was not completely divided. If not borne out always, it, however, is a good working rule, but I have seen cases where the reflexes were absent, but in which no gross lesion of the cord was found afterwards, and *vice versa*. Of the visceral reflexes, I may say, unless the spinal cord is destroyed as low as the second

umbar centre, the sphincter of the bladder will not lose its control. At first you will find that there is complete retention, and that for some time the urine has to be drawn off. That simply means that the man has not yet the power of starting the chain of nerve events which end in micturition, while the sphincter is reflexly acting and keeping back the urine: but later, and before there is much other improvement, and often accompanied by a feeling of warmth in the urethra he may begin to micturate almost in the ordinary way. Again, the rectum is not emptied, unless the bowel is overloaded, and purges therefore become necessary. Priapism generally takes place where the division of the cord, either complete or incomplete, is high up. Generally, the higher up the damage, the more marked is the priapism. It was so in our patient's case, but he was unconscious of it.

With these general clinical remarks I will outline to you the case in Cornelius, on which my remarks are founded. He is thirty-eight years of age, but he did not come under our care until some weeks after the accident. About seven weeks before admission he was said to have been kicked or knocked over by a horse; but further information was to the effect that he was doubled up in the ditch, and when picked up, from the lower part of the chest downwards was completely paralysed, both motor and sensory functions ceasing. But his consciousness was never affected. Some sensation returned soon after the accident, but no power of movement. That showed that there was not complete destruction, at least in the deeper part of the cord. For the first three weeks he could pass no urine, but the catheter was used, but since then he has been able to micturate almost naturally, though the desire to micturate must be immediately followed by the performance of the act. He still has incontinence of fæces, there is much pain in the neighbourhood of the injury, and he cannot bear to be moved or turned over. There is no knee-jerk or ankle clonus. Sir Alfred Fripp saw him on admission on August 9th, and obtained some evidence of movement in the gluteal and adductor regions. A skiagram revealed nothing. The condition on August 15th was that there was some return of motor and sensory function; but the incontinence of fæces is still present. There has been pain in the knees, accompanied by spasmodic jerking, especially in the left leg; at times the legs are thrown right out of bed. When first I saw him, twelve weeks after the accident, that is about five weeks after admission, his feet, for the reason just stated, were tied to the bed, and a reflex in the sole of the foot could be obtained. Slight voluntary power and considerable sensation had returned in the legs. Rectal control had so far returned that he for hours could retain his fæces; but when once the desire to defæcate had manifested itself the power of restraint was almost nil. In spite of the best of care pressure sores had in the past developed, though latterly they have nearly healed.

The notes of the condition at the beginning of October—*i.e.*, four months from the accident—amount to this: that his general health is good, and himself hopeful and bright, but all the conditions above mentioned exist, and, except in regard to absence of pain in the arms and shoulders, and at the site of injury, and the improvement in micturition and defæcation, there is no substantial gain. The paraplegia is certainly incomplete, yet it has not in all this time improved to any useful extent, whilst the spasms of the legs are most severe.

The two practical questions that seem to present themselves now are these: What is the patient's future likely to be? and should any operation have been undertaken at the first—I mean about the time of the accident.

As to his future, the real improvement has been so slight in four months, that considering what we know of the local conditions of the spine, and conjecturing the injury within, and now with the onset of severe muscular spasms, which, indicating a highly "sensitive" condition of the cord, such as is seen in on-coming sclerosis, I feel bound to give a bad opinion, and express the belief that though he may, with good care, live even for months, he will not further improve from the condition in which he now is. The fact of some control over the bladder being gained is an enormous asset in the prolongation of life, as catheterism being avoided the chances of cystitis are so as well. And here I may interpolate that I consider it most unjust to pass judgment, as one has seen done, on a surgeon who has charge of a spinal paraplegic case, and condemn him for the patient's cystitis. He may take the most scrupulous care to avoid all intra-vesical contamination, yet one which would fail to excite a cystitis in a normal person may be quite sufficient to do so in tissues that have lost their resisting power of paralysis; and *mutatis mutandis*, the same remark applies to the pressure sores.

As to the second question, had it been understood that overstrain (as I now believe) caused

the accident, there would have been good ground for an exploratory tomenectomy, in the hope that the wrenching of the two neural arches asunder might have caused extradural hæmorrhage rather than disruption of the cord, and though I know from experience how disappointing these cases are, much more damage being discovered than was imagined, still it is doing the best for the patient; if extradural blood is causing the symptoms, then these can be relieved; but if hopeless fracture dislocation is discovered, no harm will have at least been done by the surgeon's interference at all commensurate with the possible good.

What, however, in conclusion, I would deprecate in the strongest terms, is the idea that because these cases are generally so hopeless, all had better be operated upon on the chance of doing good to some. Such an argument is unscientific, a confession of ignorance, and may be, if put into practice, a great injustice to the patient.

As I have tried to indicate—and as I hope further to show, if I pursue this subject next week—there are many conditions that we can be as certain about as in most other traumatic states; and it is only when symptoms or the nature of the accident suggests a reasonable probability of finding a relievable condition, that operative measures are justified, and that will not be in very many cases. The injustice to the patient is seen in having submitted him to operation when in the worst possible condition to bear surgical interference; and if no good can be done, the chances are that his life will be shortened by the strain put upon him, and by the use of an anæsthetic when his breathing is severely hampered.

Life for a fractured spine case may, indeed, be often "not worth the living," but it is never our duty knowingly to do anything to reduce its limit; at least, without giving the patient some great compensation by the betterment of what is left him.

Books, etc., Received.—Fletcher's Short Practice o Medicine, Gill's The $CHCL_3$ Problem, Stewart's Diagnosis of Nervous Diseases, Rado's Life of Pasteur, Longridge's The Puerperium, Steele's Diseases of the Heart, Phillips' Diseases of Women (fourth edition), X-rays in Diagnosis—Extra Number of the Practitioner, The Dublin Journal of Medical Science, Beaney Scholars', Gull Students' and Gordon Lecturers' Reprints, The General Practitioner, West London Medical Journal.

Aspects of German Medicine

(Continued).

By Arthur F. Hertz, M.A., M.B., M.R.C.P.,
Radcliffe Travelling Fellow.

II.—The Patients.

A visit to a German clinic gives an opportunity of studying certain diseases which are comparatively infrequently seen in England. Among the most important of these are some of the conditions to which excessive indulgence in beer gives rise. Though teetotalism is almost unknown in Germany, drunkenness is much rarer than in England. This is due to the considerably smaller quantity of alcohol contained in German than in English beer, and to the fact that comparatively little spirits are drunk. But it is the very lightness of the beer which encourages the people to drink excessively, and harmful results, though they come insidiously, come none the less certainly or frequently. The enormous quantity of beer which is sometimes drunk is almost incredible. A Bavarian peasant, admitted into Professor Müller's clinic in the last stages of hepatic cirrhosis, had been in the habit of drinking twenty litres (thirty-five pints) a day, and on great occasions had drunk as much as double this amount. An Austrian student, to whom I related this, seemed to consider a man who could drink twenty litres a day a man to be envied, and he told me with some pride that he himself had drunk sixteen litres in a single evening.

It is a sorry spectacle to see crowds of students, who at English universities would be taking part in healthy out-door sport, spending the whole afternoon in a beer shop, drinking and playing dominoes or cards. There is no hour in the day when a German is not ready for a mug of beer and a ham sandwich. I can quite believe what a distinguished German officer told me, that the country would be in a bad way if it were not for conscription, which takes the young men away from their beer, gives them a taste for open-air life and exercise, and counteracts as nothing else can the disastrous effects of their love of drinking.

The most common result of this excessive indulgence in beer is the production of obesity, which is far more common in Germany than in any other country I have visited. A litre of German beer contains about 50 grms. of carbohydrate and in addition 20 to 30 grms. of alcohol, so that its heat value is about 400

Calories. Hence, if the Bavarian peasant who drank twenty litres a day had eaten nothing at all, he would still have taken food with sufficient energy value for three normal men. It is exceedingly common in Germany to find people who drink five or six litres a day, but instead of eating only about two-thirds of the amount of solid food required by a total abstainer, they usually have such big appetites that even without the addition of the beer they would find it difficult to keep thin.

Diseases due to the toxic effects of alcohol itself or of poisons associated with it are about equally common in Germany and England, though the relative frequency with which different organs are attacked is different. Neuritis is uncommon, but according to Kraepelin alcohol is the chief factor in the production of insanity in Germany. Cirrhosis of the liver is less often seen than in England, but cardiac disturbances due to alcohol are far more frequent. These are of two kinds. The most frequent is that found in the majority of very fat beer-drinking people—a flabby heart. Neither fatty infiltration nor fatty degeneration is present; in fact, microscopically, the heart appears to be normal. But it is remarkably flabby, and instead of retaining to some extent its normal shape when removed from the body, it collapses to a more or less shapeless mass. It is often dilated, but never hypertrophied, and sooner or later it gives rise to the general symptoms of cardiac insufficiency. It is supposed to correspond to the similar flabby condition of fat people's voluntary muscles, which may also show no anatomical change, though in life they feel soft and are functionally inefficient.

The second type of alcoholic heart—the Münchener Bierherz—is much rarer, and is the same as the "alcoholic heart" described recently by Dr. Hale White in the Guy's Hospital Reports. It is seen almost exclusively in men of one type—the hard-working Bavarian peasants, who from childhood are accustomed to drink enormous quantities of beer all day long with only short intervals, so that they have neither time nor inclination to take any other nourishment. For a time they are able to do their work well, and owing to their hard physical labour their muscles are splendidly developed and they do not become fat. Quite suddenly, at the age of thirty or thirty-five, the collapse comes. The heart, which has gradually become greatly hypertrophied without giving rise to any symptoms, dilates, and symptoms of cardiac insufficiency rapidly develop. The condition becomes steadily worse, and all treatment is unavailing. Death almost always follows in a few days or weeks, and the autopsy reveals an enormously hypertrophied and somewhat dilated heart, the valves and muscles of which are apparently perfectly normal.

Typhoid fever is distinctly more common in Germany than in England. Its spread is generally believed to depend upon direct contagion rather than contaminated water or food. Nurses and visitors to the patients are not infrequently infected, and it is considered absolutely necessary to isolate all typhoid cases in special wards. Several people with whom I conversed on the subject expressed their surprise or even disbelief that cases could be admitted to the general wards at Guy's without infecting the other inmates. The explanation of the frequent spread by contagion in Germany is undoubtedly to be found in the very rudimentary ideas which are prevalent as to the necessity of personal disinfection after coming into contact with typhoid patients. On several occasions I have seen such cases brought into the clinic and there examined by the professor and one or two students, who not only felt the pulse and palpated the abdomen, but actually auscultated the back of the patient with the ear in contact with the skin. This performance was not followed by washing the face, and even the hands were often not disinfected, although the majority of students go directly from the clinic to their "second breakfast" of ham sandwiches and beer. To my astonishment I once saw a distinguished professor shake up a test-tube containing a typhoid patient's urine with Ehrlich's reagent, holding his thumb on the top to prevent spilling. He then dried his thumb on his handkerchief, with which he proceeded to wipe his mouth and nose.

In addition to isolated epidemics, sporadic cases of cerebro-spinal meningitis not infrequently occur in all parts of Germany. Smallpox is absolutely unknown, owing to the rigid enforcement of vaccination.

Venereal diseases are extremely common in Germany, the registration of prostitutes having failed almost completely in the desired results. A determined attempt, however, is being made to limit the ravages of the disease, chiefly by educational means. Thus every undergraduate, when he matriculates at the University of Munich, receives with the various official documents an admirably worded warning against the temptations he will encounter, and at many universities a series of

lectures on the subject is delivered to students of all faculties by one of the medical professors.

Venereal diseases in the lower classes are, on the whole, more thoroughly treated than is possible in England, as a very much larger number of beds is reserved for such cases in the hospitals. Even a patient with a simple hard chancre or acute gonorrhœa is often treated as an in-patient instead of being free, as an out-patient, to spread the disease still further. It is also easier to impress syphilitics with the importance of long-continued treatment if they are taken into the hospital for a short time than if their only contact with the doctor occurs at the weekly visit to a crowded out-patient department. The treatment of gonorrhœa, moreover, can be thoroughly and radically carried out.

The greater frequency of a particular disease in one country than in another is sometimes only apparent. Thus it is generally believed that gout is rare in Germany. As a matter of fact it is not rare, but rarely recognised. The records of the Munich hospital up to 1900 show that the number of cases seen there in a year rarely exceeded two or three. Since Professor Müller, who is specially interested in the subject, has been there, the number recognised has very largely increased, owing doubtless to the fact that gout is now more carefully looked for and the possibility of its presence is never forgotten. It seems probable, indeed, that the disease occurs not much less frequently in Bavaria than in England.

On the other hand, there are a number of conditions which are apparently more common in Germany than in England, but are probably frequently overlooked here owing to ignorance as to their existence. In every hospital the origin of numerous cases of pyrexia with general febrile symptoms lasting for varying periods remains obscure. It has recently been found that in young women the cause is very often pyelitis. The only localising symptom which might suggest the presence of the condition is polyuria. The urine is acid and contains leucocytes and epithelial cells, but only traces of albumen. Bacterial examination of the urine invariably reveals the presence of the *Bacillus coli communis*. The disease is always associated with constipation, and presumably the pelves of the kidneys become infected from the bowels. The patient may be so ill that typhoid fever is suspected, and the pyrexia may last for several weeks or even months, in which case tuberculosis is generally diagnosed. Aperients relieve but do not cure the condition, which clears up immediately on giving urinary antiseptics, such as urotropine.

Though it may be usual in England to examine the urine of patients with tonsillitis for albumin and sugar when they are first seen, a second examination is not often made. The daily complete examination of the urine of all cases, as a matter of routine, in the Munich clinic has led to the important discovery that it is not at all a great rarity for glycosuria to appear as a late complication of tonsillitis. The glycosuria is not merely alimentary, but a manifestation of true diabetes, as the sugar remains in the urine at first on a carbohydrate-free diet, though it soon gradually disappears, until as a rule in the course of a few weeks a full diet can be given without a recurrence of the glycosuria. In some cases, however, the diabetes is permanent, though had it not been for the daily examination of the urine the onset would probably have been missed, and the disease when discovered later would have appeared to have arisen without any discoverable cause. A similar glycosuria has been observed to follow pneumonia and influenza, and less often diphtheria and typhoid fever.

It is often stated that follicular tonsillitis differs from diphtheria in being rarely accompanied by albuminuria. Daily examination of the urine shows this to be incorrect, as the large majority of patients with tonsillitis have albuminuria at some period during the course of the illness. A similar daily and very careful microscopical examination of the urine has shown that not only casts, but also kidney cells and red blood corpuscles frequently accompany the so-called "febrile albuminuria" of all infective diseases. Hence the separation of febrile albuminuria from nephritis complicating a fever, though possibly justified by quantitative differences, has certainly no qualitative foundation. It is remarkable to find that most German authorities consider that not only a definite acute nephritis, but also an apparently temporary "febrile albuminuria," may be the precursor of a chronic nephritis. Granular kidney is frequently classed as a form of chronic nephritis; and it is generally taught that it may be the late stage of an acute nephritis and not always, as believed in England, a primary degenerative disease with an insidious onset.

Recent researches have also shown that albuminuria and casts are found in small quantities almost constantly during the administration of salicylates, so that it would appear that the well-marked changes in the urine described some years ago by Dr. Shaw were

only an exaggeration of a slight but constant injurious action of salicylates on the kidneys.

It has been found by frequent microscopical examination of macroscopically normal tissues that meningitis, unrecognisable by the naked eye, is not infrequently present as a complication of pneumonia and typhoid fever, when these diseases have been accompanied by cerebral symptoms.

It is remarkable what a very large number of cases of gallstones are recognised and treated by operation in Strassburg, in spite of the majority showing few more localising symptoms than vague abdominal pains and indigestion without colic or jaundice. This may, of course, be due to unusual frequency of the disease in Alsace, but considering how often gallstones are accidentally discovered at post-mortem examinations in other parts of Germany, as well as in England, it would appear that the traditions of the clinic in which Naunyn did his classical work on the pathology of gallstones, cause his successor and his pupils to be on the look-out for their presence, when the symptoms alone would not suggest the diagnosis to the majority of observers.

There are few English physicians and pathologists who do not believe that the micrococcus discovered by Poynton and Paine is the specific organism of acute rheumatism. Though the discovery is now five years old, it is not only unknown to German physicians, but in a book of nine hundred pages on bacteriology, published this year by a German author, the names of Poynton and Paine are not even mentioned. I heard one of the most distinguished of German physicians spend a quarter of an hour discussing the pathology and bacteriology of acute rheumatism without referring to the micrococcus of Poynton and Paine, and he came to the final conclusion that nothing is known on the subject of the bacteriology of the disease. This widespread ignorance of the subject is due to the fact that English medical literature is hardly read at all in Germany. But the German bacteriologists who have worked on the ætiology of acute rheumatism have not confirmed the results of Poynton and Paine. This, I believe, is owing to the infrequent occurrence of typical acute rheumatism in most parts of the country. I did not see a single case during the autumn and winter I spent in Munich. Consequently the disease is not properly recognised, and one of the leading clinicians of Germany actually told me that he did not believe that any definite line could be drawn between acute rheumatism, septic arthritis, and gonorrhœal arthritis. The word rheumatism is, in fact, still applied to almost all multiple joint diseases, both acute and chronic, and these are often regarded as being simply varieties of the same disease. Hence, when we hear that in a number of cases of "rheumatism" an ordinary streptococcus has been found, or that in another series no organism has been isolated, we can be fairly certain that the work has not been confined to genuine cases of acute rheumatism, for when the physician's diagnosis is open to suspicion, it is hardly safe to rely on that of the bacteriologist. I must admit, however, that the criticisms of Poynton and Paine's work which I heard in America, and especially in Baltimore, where the disease is well recognised and has been very carefully investigated by some expert bacteriologists, seemed to me to be of much greater importance. It would appear that we in England are rather too much inclined to believe that the proof of the specific nature of Poynton and Paine's organism is established with certainty.

There are some points of interest in the German nomenclature of disease. Die englische Krankheit—the English disease—is the inappropriate name popularly given to rickets; inappropriate, because from what I saw I should say that rickets is no less common in Germany than in England.

It is strange to find that exopthalmic goitre is known universally as Basedow's disease, although Parry of Bath described it fifteen years and Graves five years earlier than Basedow with equal or greater accuracy. In curious contrast, infantile scurvy is always called Barlow's disease, although in his own country the disease is not often associated with the name of Sir Thomas Barlow.

Appendicitis is generally referred to as inflammation of the cœcum (Blinddarmentzündung), and typhoid fever is called typhus, though sometimes the prefix abdominal is added to distinguish it from "spotted" typhus (Flecktyphus).

(To be continued.)

Appointments.

Naval and Military.

Staff-Surgeon Percival M. May, R.N., is appointed to the *Hannibal*, and Surgeon C. R. Nicholson to the *Egmont* at Malta.

Colonel F. W. Trevor, M.B., R.A.M.C., has been appointed to officiate as Principal Medical Officer, Western Command, from April 18th, and on promotion to be Surgeon-General, is confirmed in that appointment from July 15th.

In Lighter Vein.

A CASE FOR DIAGNOSIS.

L—— was, at the commencement of July, 1906, a healthy, good-looking man, 22 years old. Hitherto he had not had a day's illness. Early in July, he began to experience a feeling of malaise; he lost his appetite, and was troubled with restlessness and loss of sleep. Application to work became an effort, and during the month he steadily lost weight.

About July 25th, there was a marked accentuation of these symptoms, with occasional attacks of palpitation. The tongue and pharynx were dry, and patient had a nervous, short cough. He had a fear of impending evil, and was alternately melancholic and excitable. On August 2nd, the condition became acute; there was nausea at the sight of food, a rapid pulse, and temperature of 99·6°. This lasted all day. In the afternoon he went out to tea, and managed to eat one or two cakes, which he described as "deadlies." Half-an-hour later, excitation was acute; pulse 120; palpitation of heart distressing; impulse forcible, but no bruits were heard. This culminated in a sharp cry, a sudden weakness of the lower limbs causing him to fall forwards on to his knees, and in convulsive movements of face and arms.

He was quickly placed in a chair and his head kept low, with a cool application to the forehead. Convulsive movements soon ceased, save for an occasional recurrence, and patient felt better. Mental condition rapidly improved, and palpitation was less distressing, though pulse remained bounding and rapid for some hours.

He was unable to sleep that night; the next day, a careful examination of his blood was made, and the following report sent from the Bacteriological Department:—

"Bouillon culture of this specimen shows, in hanging drop under high power, a minute bacillus, actively mobile. On appropriate staining, each bacillus is seen to have several flagellæ, and in many cases bacilli pair by the interlacing of one or two of these flagellæ, so as to give rise to an appearance (with ordinary stain) of Diplo-cocci."

For two days patient seemed much better, but not normal. Mental symptoms, such as delusions and "brown study," were evident, and patient seemed suspicious of his friends. On August 5th, patient suddenly became much worse. He was found in a state of collapse and moaning in pain. He attempted to resist examination, but no abnormal P.S. were found. Temp. sub-normal; pulse good tension, but somewhat rapid and irregular; face pale. A mental condition of deep melancholia supervened, and on August 7th, in an unguarded moment, patient made for his bedroom window and threw himself out. Death was instantaneous.

P.M. Report, etc.—Disease: Acute infection by B. A. C. (Bac. Amoris. Communis), with crisis (acceptance) on August 2nd. "Secondary refusal" on August 5th caused the relapse.

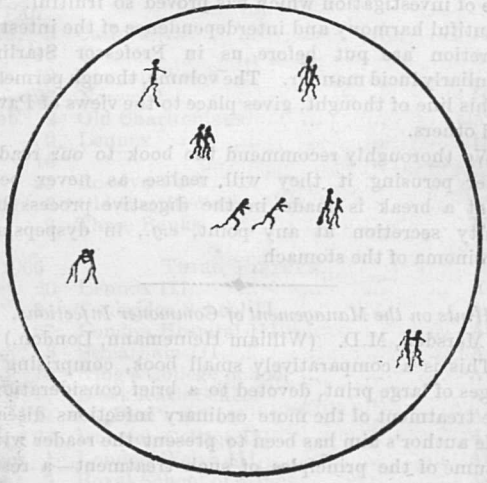
P.M.: Blood and whole body warming with B. A. C.; heart dilated, and on its anterior surface could be traced in lines of hypertrophied bundles of muscular fibres the name ——

The Coroner's jury gave their usual verdict, "Suicide during temporary insanity," and added a rider, recommending that infection by B. A. C. should be made a notifiable disease.

An authority to whom we have submitted the above writes to us as follows:

To the Editor of GUY'S HOSPITAL GAZETTE.

DEAR SIR,—I have read the case for diagnosis with great interest. Having had several similar cases lately under my care, I have been able to isolate the bacillus on more than one occasion. The symptoms of the disease are very variable, but the description of the bacillus in your case agrees very closely with my own researches. Each bacillus has four flagellæ, two at one end and two laterally-placed, and the opposite end of the bacillus is knob-shaped. The accompanying drawing shows the main characteristics, and their method of pairing.



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Trusting this may be of interest to your readers, I remain, yours sincerely,

——, L.S.A., M.D. Brux.

The Ballyfooly School of Atypical Medicine,
Ireland.

Reviews.

The price of books submitted for review should in every case be stated.

Annual Reports on the Advancement of Pharmaceutical Chemistry and Therapeutics. Vol. xix. (E. Merck.)

This careful compilation of facts and of the literature concerning the most recent drugs is an interesting record of the progress in pharmacology and therapeutics during the past twelve months. All the new drugs are dealt with, and an exhaustive bibliography is given under each heading. The new departures in serum- and organo-therapy are specially dealt with. None of the articles are long; all are interesting. In particular we may refer to the notes on metallic ferments, on the uranium compounds, and on stovaine, which contain much that is original, and will well repay perusal. The volume, which should prove valuable as a book of reference, may be obtained on application to the publisher, E. Merck, 16, Jewry Street, E.C.

Recent Advances in the Physiology of Digestion. By E. H. Starling, M.D., F.R.S. pp. 156. (Archibald Constable & Co., Ltd.) 6s. net.

This volume contains the subject-matter of a course of lectures delivered at University College. It gives an excellent account of a very interesting subject. The Physiology School at University College has added greatly to our knowledge of the mechanism of digestion in the past four years. It took up the work where the Pavlow school failed, and in the discovery of chemical stimuli to secretory glands (harmones) opened up a new line of investigation which has proved so fruitful. The beautiful harmony and interdependence of the intestinal secretion are put before us in Professor Starling's peculiarly lucid manner. The volume, though permeated by his line of thought, gives place to the views of Pavlow and others.

We thoroughly recommend the book to our readers. After perusing it they will realise as never before what a break is made in the digestive process by a faulty secretion at any point, *e.g.*, in dyspepsia or carcinoma of the stomach.

Hints on the Management of Commoner Infections. By R. Marsden, M.D. (William Heinemann, London.)

This is a comparatively small book, comprising 127 pages of large print, devoted to a brief consideration of the treatment of the more ordinary infectious diseases. The author's aim has been to present the reader with a résumé of the principles of such treatment—a résumé which will be of use to the busy practitioner as well as to the student commencing his course of "fevers." Only such illnesses as are directly due to micro-organisms, and of these only such as are endemic in this country, are dealt with, and the book does not pretend to consider them exhaustively. As it is exclusively devoted to a discussion of treatment, symptomatology and ætiology are not dealt with. The lines of treatment laid down are those usually accepted, and present nothing that calls for special mention. The author has much good to say in favour of the many serums—even the treatment of scarlet fever by Moser's polyvalent anti-streptococcic serum being referred to—but is comparatively silent about the action of the majority of the newer therapeutic remedies now so largely being used on the Continent, and it may be questioned whether any reference to these still obscure aids would have materially helped the student or practitioner who refers to this book. The little volume contains some excellent practical hints, and should certainly prove useful to those who desire fuller details of the ordinary lines of treatment than are given in the usual text-books.

The Theory and Practice of Surgery. By W. J. Walsham, F.R.C.S., and W. G. Spencer, M.S. (J. & A. Churchill, London). 18s. net.

For the past twenty years this handbook has enjoyed a deservedly high reputation, and this, the ninth edition, will certainly tend to keep up and add to its well-merited popularity. The last edition appeared three years ago, and consequently the additions to the present volume are both numerous and important. Several skiagrams have been included, together with other photographs of clinical and pathological interest, and on the whole the reproductions are admirable. Some of the microscopical photographs, however, especially such as are inserted in the text, are blurred and hardly so useful for purposes of reference as they might be.

It is open to discussion whether a book such as this, which is meant for a pure surgical text-book, should concern itself so intimately with bacteriology and anæsthetics as to devote a chapter to each of these important subjects. However well done—and both chapters are excellently written—they cannot serve as substitutes for the recognised text-books which the student will have to use, and under the circumstances it appears to us much better to leave them out and to take it for granted that the reader possesses that modicum of knowledge of these two important subjects necessary to understand such references as are made to them in an ordinary surgical text-book. In the volume before us the chapter on anæsthetics mentions Brier's intra-arachnoid method, as well as the electrolytic method of cocainising, but stovaine anæsthesia is not even hinted at. A brief account—as much, perhaps, as is warranted—is given of the opsonic treatment. On the other hand, we fail to find any mention of the trypsin injection method of treatment in cases of inoperable carcinoma, though both the thyroidin and Coley methods are referred to. In a text-book unqualified dogmatism is not only justifiable, but absolutely necessary, and there are some statements in this edition which the student will find are in direct opposition to the teaching of his other manuals—such as, for instance, that "in acromegaly the pituitary body is always affected." The hypercritical

reader may also object to the illustration of the Hodgen splint. With these few exceptions the book is in every way an excellent text-book, and as such it may be confidently recommended to anyone who wishes to have a sound up-to-date surgical handbook at a moderate price.

Applied Bacteriology. By C. G. Moor and R. T. Hewlett. Third edition. Pp. 475. (University Series.)

This book has been altogether revised and rewritten, but does not seem to have been brought very much up to date. It is very bulky, as the paper it is printed on is thick, and for so large a book it misses a great deal of essential material. The illustrations at the end of the book are like those in Saunder's Bacteriology, while those in the middle of the book are not altered much from the last edition. Altogether it is not a book we can recommend to the early or advanced student of Bacteriology.

The Treatment of Diseases of the Digestive System. By Robert Saundby, M.D. Pp. 133. (Messrs. C. Griffin & Co.) 3s. net.

The writings of Dr. Saundby are many, and are generally so good that we regret the publication of this work, which—if we may say so—is unworthy of him. It is extremely sketchy, and contains nothing new; all its teaching is contained in the ordinary text-books, which moreover often give fuller details.

The limits which Dr. Saundby has imposed on himself have sometimes prevented him from clearly expressing his meaning. For instance, in discussing cancer of the rectum, he says, "The treatment must be palliative. Should obstruction occur, surgical assistance must be obtained, and a colotomy performed." The author should have written at greater length—and then he would at least have mentioned that removal of the growth is sometimes possible. There is a good chapter on Constipation, and we are pleased to see that emphasis is laid on the fact that acute epigastric pain often heralds the onset of Diabetic Coma.

Appointments.

Civil.

Attwood, R. D., M.R.C.S., L.R.C.P. Lond., has been appointed District Medical Officer of the Royston Union.

Copland, J. B., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Medical Officer to the Victoria Hospital for Children, Chelsea, S.W.

Parsons, J. E. H., M.R.C.S., L.R.C.P. Lond., has been appointed District Medical Officer of the Chipping Norton Union.

Williams, R. O., M.B., B.S. Lond., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Medical Officer to St. John's Hospital, Lewisham, S.E.

Sport.

RUGBY FOOTBALL CLUB FIXTURES.

1906		First Fifteen.	
Oct.	20	Rosslyn Park	Home
	24	Cambridge University	Away
	27	London Welsh	Away
Nov.	3	U. C. S. Old Boys	Home
	10	Streatham	Home
	17	Old Merchant Taylors	Home
	21	Dublin University	Home
	24	London Irish	Home
Dec.	1	United Services	Home
	9	Stade Bordelais Université	Away
	15	Richmond	Away
	29	Old Leysians	Away
1907			
Jan.	5	Catford Bridge	Away
	12	U. C. S. Old Boys	Home
	19	London Welsh	Home
	26	Northampton	Away
	30	Oxford University	Home
Feb.	2	Old Alleynians	Home
	9	Blackheath	Away
	16	Newton Abbot	Away
Mar.	9	Rosslyn Park	Away

1906		Second Fifteen.	
Oct.	20	Rosslyn Park	Away
	27	African Banks	Home
Nov.	3	Beckenham	Away
	10	Streatham	Away
	17	Norwood	Away
	24	London Irish	Away
Dec.	1	U. C. S.	Away
	8	African Banks	Away
	15	Old Whitgiftians	Home
	29	Beckenham	Home
1907			
Jan.	5	Catford	Home
	12	U. C. S.	Away
	19	London Welsh	Away
	26	Norwood	Home
Feb.	2	Old Charltonians	Away
	9	Lennox	Home
	16		Away
	23	Rosslyn Park	Home
Mar.	3	Old Charltonians	Home
	9	Three Banks	Home

1906		Third Fifteen.	
Oct.	20	Lennox III.	Away
	24	Tonbridge School II.	Away
	27	London Hospital III.	Away
Nov.	3	Streatham III.	Away
	10	King's College School	Away
	17	Blackheath School	Away
	24	St. Paul's School "A"	Away
	28	Dulwich College II.	Away
Dec.	1	London Welsh III.	Away
	5	Royal School of Mines	Away
	8	King's College Engineers	Away
	15	Streatham III.	Away
1907			
Jan.	12	Old Alleynians III.	Away
	16	King's College Engineers	Away
	19	Lennox III.	Away

Jan. 23	Royal School of Mines	Home
26	Blackheath II.	Away
Feb. 2	Blackheath School	Away
16	Harlequins III.	Away
Mar. 2	Old Alleynians III.	Away
9	Sidcup "B"	Away
20	King's College School	Away
23	Richmond "B"	Away

ASSOCIATION FOOTBALL CLUB FIXTURES.

First Eleven.

1906			
Oct. 20	Old Citizens	Home
24	Sanatorium	Away
27	Old Cranleighans	Home
Nov. 3	Surbiton Hill	Home
7	Felstead School	Away
10	Old Foresters	Away
14	Casuals	Home
17	Old Reptonians	Home
21	Eastbourne	Away
Dec. 1	Reigate Priory	Away
8	Beckenham	Away
15	Old Tollingtonians	Home
19	Emeriti	Home
22	S. E. College	Home
29	Eversleigh	Away
1907			
Jan. 5	Sanatorium	Away
12	Beckenham	Home
16	Casuals	Home
19	Old Westminsters	Home
23	Emeriti	Home
26	Clapham Rovers	Home
Feb. 2	H. A. C.	Away
9	Clove	Away
13	Wellingboro' Masters	Home
16	Royal Engineers	Away
23	Surbiton Hill	Away
Mar. 2	Eversleigh	Home
9	Weybridge	Away
16	Ramsgate	Away

Second Eleven.

1906			
Oct. 20	Old Citizens "A"	Away
27	Brentwood Alumni	Away
Nov. 3	Reigate Priory "A"	Away
10	Central Technical College	Home
14	Brentwood School	Away
24	Old St. Catherine's	Away
Dec. 1	Old Cranleighans "A"	Home
5	City of London School	Away
8	Beckenham "A"	Home
15	Foxes	Away
1907			
Jan. 5	Foxes	Home
12	Beckenham "A"	Away
16	Royal School of Mines	Away
19	St. John's Hall	Away
26	Old St. Catherine's	Away
Feb. 2	Manor House School	Home
6	Brentwood School	Away
9	Brentwood Alumni	Home
16	Reigate Priory "A"	Home
23	Old Citizens "A"	Home
27	St. John's Hall	Away
Mar. 2	Old Tollingtonians "A"	Away
9	Old Westminsters "A"	Home
16	Old Finchleians	Away

Rugby Football.

GUY'S v. LENNOX.

Played October 6th at Honor Oak Park. This was the first match of the season, and we had all except three of our last year's cup team playing. Alcock and Llewellyn are not up this term, and Lee was unable to play owing to an injured foot. Their places were filled by Harrison, Digby, and Williams, a freshman. The ground on Saturday was very hard. We won the toss and played with the wind and sun in our favour. Lennox kicked off and Williams returned the ball with a short kick into touch. The first half was very even, our forwards getting the ball more often in the scrums, but the Lennox halves were too quick and our three-quarters could never get going. Harrison and Jones attempted to drop goals, but both kicks went wide. At half-time there was no score.

After the interval Saunders kicked off, and soon the Lennox three-quarters started a movement which, after a splendid round of passing, resulted in a try wide out. The kick failed. On the game being re-started our forwards made some splendid rushes, and our three-quarter line got moving, but the ball never seemed to get to the wings. From a forward rush the ball was kicked wide and bumped the right way for Stringer, who was following up, and he, easily running round the Lennox back, scored. Saunders converted with a nice kick from a difficult angle. On re-starting play our forwards kept up the attack, and soon we were given a free kick for off side. Harrison's attempt at goal fell short. From a forward rush Alcock scored and Saunders converted. There was not much more time left to play, but the forwards kept up the pressure and rushed the ball over the goal line again; however, the try was not allowed. Soon after the whistle went for no-side, the score being 10—3 in our favour.

Remarks.—Our forwards did not play with their usual dash, but they were getting the ball well in the scrum. None of the team were especially brilliant. We had the best of the game all through, but failed to increase the score owing to our inability to open up the game. Team:

Guy's.—Gibson (back); Digby, Harrison, Williams, Stringer (three-quarter backs); Jones and Monaghan (half-backs); Saunders, Mullins, Williams, Archer, Alcock, Pinching, Hind, Milton (forwards).

GUY'S v. CATFORD BRIDGE.

Played October 13th, at Honor Oak Park. The weather being fine there was a very fair attendance, Catford having a good many ardent supporters. The ground was in splendid condition, and a strong wind was blowing down the ground from the pavilion end when the game started. Some alteration, had to be made on our side, Gibson and W. E. Williams being on the injured list. McEvedy took Gibson's place at back, and Crook was tried forward. Lee played in the centre with Digby, and Rutter played on Digby's wing, while A. D. Williams played scrum half.

Saunders lost the toss and kicked off facing the wind. Almost immediately after the start Alcock put us in an attacking position by running into our opponents' twenty-five, but we lost ground by being penalised for foot up. Digby returned the kick, making touch at the halfway line. The ball was then kicked up to McEvedy, who slipped into touch while taking it. The throw out of touch was crooked, and Jones getting the ball from the scrum relieved with a splendid kick. The forwards were working well, and helped by Williams made a grand rush to our opponents' twenty-five. Play then returned to halfway, but our forwards rushed the ball down the field over the goal line, Catford saving the try by kicking the ball behind. Soon after the drop out Pinching scored after a splendid rush headed by Saunders and Mullins. Saunders failed with the kick. On re-starting Archer was prominent, and Stringer lost a certain try by fumbling his kick across. The play then returned to halfway and Rutter gained ground with a nice kick into touch. Crook then took the ball up to the back and passed to Alcock, who scored. Lee's kick failed. The drop out was returned by McEvedy to halfway. After some tight scrums Digby fielded and passed to Archer, who kicking across enabled Saunders to score. Lee's kick again failed. Soon afterwards half-time arrived with the Hospital leading by 9—0. Up to this point the forwards had all the play, Jones being too well marked to give the three-quarters a chance.

On re-starting the Catford three-quarter line got moving, but were stopped by Stringer in our twenty-five. The pressure was relieved by the forwards. Catford made a mark and kicked high, but Mullins making a mark from their kick returned the ball to our opponents' twenty-five. Stringer then kicked too hard and the ball went dead. Our three-quarter line got moving, and McEvedy coming in passed to Digby, who was collared in their twenty-five. A kick was then given against us for foot up, and McEvedy returned it to the Catford back, who fumbled and put us in a strong position. Jones obtained the ball from a scrum, and being forced towards the left touch line, kicked across to Stringer who scored on the right touch line. Saunders' kick just went wide. We still kept up the pressure and Digby had a drop at goal and the ball went dead. Mullins made a mark from the drop out and Lee had a shot at goal. After some hard play in mid-field our three-quarter line got moving, and McEvedy again coming up passed to Stringer, who scored near the touch line after a grand round of passing. Saunders converted with a magnificent kick. Our forwards were giving their opponents no quarter, and were getting the ball well, Digby picking up and making ground passed to Rutter, who scored. Saunders' kick hit the upright. The wind was helping us, and Mullins and Lee making marks kept up the attack in putting long kicks. There was not much more time left, but our three-quarters again got on the move and McEvedy was just held up on the goal line. From the scrum that followed Williams scored and Saunders converted. The whistle then went for no side, leaving us victors by 2 goals and 5 tries—0. It was a great game. Our forwards all played grandly, both in the loose and tight scrums, their packing and heeling was very good, but the ball tended occasionally to hang in the back row. The three-quarters kicked well, but had a tendency to go too high for their men. They had but little chance of showing their attacking powers. Team:—

Guy's.—McEvedy (back); Rutter, Digby, Lee, Stringer (three-quarter backs); Jones, Williams (half-backs); Saunders, Mullins, Pinching, Archer, Alcock, Hind, Crook, Milton (forwards).

Association Football.

GUY'S v. WELLINGBOROUGH MASTERS.

This, the first match of the season, was played at Wellingborough in ideal weather, on Saturday, Oct. 13th.

Guy's made the journey with a very patched up team, there being only five first eleven men in the team; however, with the assistance of some promising 2nd XI. men, we were able to come through the ordeal very creditably. Guy's won the toss, and during the first half had the valuable aid of a fairly powerful sun and a slight breeze. Play was of a very even character and the ball travelled freely from end to end, but the defence held the upper hand until King, after a fine run down the right wing, gave us the lead, with a magnificent shot from very near the touch line after twenty minutes' play. Nothing more was scored before half-time, although both goals had some very narrow escapes, and the goal keepers may be considered somewhat lucky in not being beaten again, but it must be borne in mind that both were in good form. After the re-start the game was continued at a hot pace, and many of us regretted being in such poor training, which was further accentuated by a strong sun. Wellingborough pressed our defence frequently and equalized at the end of fifty-five minutes' play, Wood being beaten by a fast low drive from the centre forward, which he allowed to screw out of his hands and roll slowly over the line. This made the game yet more exciting, but it must be admitted Wellingborough had rather more of the game during this half and kept Wood on the alert. They experienced very hard lines in not gaining the lead by a fine shot from the right which struck the inner side of the upright and then rebounded into play, being subsequently cleared. King was a frequent source of trouble to the opposing defence, and he outpaced his opponents time after time. About ten minutes before time Wellingborough gained the lead by a palpably off-side goal, but which, to our great surprise, was allowed. This proved to be all the scoring, and we may be considered unlucky in losing a most enjoyable and exciting game by the odd goal in three, a draw more accurately indicating the run of play. Team:—

Guy's.—C. A. Wood (goal); E. G. Robertson, H. R. Bastard (backs); C. W. Greene, C. M. Plumptre, K. H. Hole (halves); — Mitchell, E. B. Hinde, H. E. Marsh, C. Witts and R. M. King (forwards).

Remarks.—The game was rather fast for an opening game, and had some of us been in better training, doubtless we would have enjoyed it the more. Of the forwards, King was far and away the best. Some of his speedy runs along the touch line were delightful, and his goal was a magnificent effort. He makes an excellent outside right, but should centre before getting so near the corner flag. Several of his centres were rendered useless because of this. Witts made a good partner to King, but failed to give us any of those fast drives of his. Marsh, in the centre, was a hard worker, but he showed a tendency for being off-side. Hinde played a good game at inside left and should be very useful. Mitchell showed occasional flashes of good form, but should make more headway and not return the ball immediately he receives a pass. We had none of the regular halves playing—that well-known trio who have been so valuable to us in former days. However, Green, Plumptre and Hole, did many good things, Plumptre, perhaps, being slightly the best. The backs were kept busy, especially during the second half, but they erred in not attempting to save the second goal, as also did Wood. Wood was in good form and he saved us on several occasions. Some of his punches were great—it gives the team a reasonable amount of confidence to have him in the last line of defence.

Guy's Hospital Rifle Association.

The Annual General Meeting of the above was held in the Anatomy Theatre on Tuesday last at 4 p.m. Sir Alfred Fripp kindly consented to take the chair. The minutes of the last General Meeting having been read and signed, the Secretary then read the Report and Accounts for the past year. No criticism being offered on the above, he then submitted to the meeting the Committee's proposals for the ensuing year. These may be briefly summarised under three headings:—1. Rifle Shooting. 2. Revolver Shooting. 2. Establishment of Miniature Shooting.

1. With regard to rifle shooting the committee propose to fix some two or more days, distinct from Armitage days, for men to shoot, sweepstakes or some other competition under handicap being arranged. Sir Alfred Fripp suggested that one of these should be during the first week in May, and that strenuous endeavours should be made to get *all* the shooting men to go down on that day, thereby enabling the committee to select the strongest team. An endeavour will also be made to arrange one or two matches.

2. As the secretary pointed out, there are several men here who shoot with a revolver, but don't go in for rifle. Arrangements will therefore be made that a day or two for practice will be fixed.

3. The suggestion of a miniature range was first made by Mr. Golding-Bird in May last, and this, coupled with Mr. Howell's letter in the last Gazette, decided the committee to endeavour to formulate a plan. Obviously a range within the precincts of Guy's would be more convenient than elsewhere, so Sir Cooper Perry was consulted. He thought the plan quite feasible. The only possible site is the passage between the Dissecting Room and the Nurses' verandah. This being Medical School territory, Dr. Eason was interviewed. He expressed his sympathy with the scheme, but was unable to give his consent until the scheme has been approved by the Council of the Clubs' Union, to whom it has been submitted.

The meeting unanimously supported the above proposals. The following officers were then elected for the ensuing year:—

President: Sir Alfred Fripp. Vice-Presidents: G. Newton Pitt, M.D., A. P. Beddard, M.D., L. A. Dunn, M.S., M. S. Pembrey, M.D., R. P. Rowlands, M.S. Captain: C. B. Ticehurst. Hon. Sec. and Treasurer: H. J. Henderson. Committee: L. L. C. Reynolds, E. P. Minett, G. A. Blake, F. H. Fuller, and one other man, Dental or First Year's, to be selected by above.

The proceedings were terminated with a vote of thanks to the Chairman.

Births.

ARCHER.—On October 7th, at "Keston," Hamlet Court Road, Westcliff, Essex, the wife of Archibald Archer, L.D.S. Eng., of a son.

BOOKER.—On October 1st, at Witley, Surrey, the wife of Charles W. Booker, F.R.C.S., of a daughter.

SUTTON.—On September 21st, at Sidcup, to C. R. Arnold Sutton, M.A., M.D. Cantab., a son.

Marriages.

BUTLER—SWIFTE.—On September 25th, at St. Mary's Church, Dover, by the Rev. W. A. Wordsworth, James Alfred Butler, M.D., B.S. Lond., of 280, Goldhawk Road, Shepherd's Bush, W., son of J. G. Butler, Esq., to Beatrice Mary, daughter of the late Colonel J. W. Swifte, Indian Army, and of Mrs. Swifte, 4, Camden Crescent, Dover.

HOLT—HUBBUCK.—On the 16th inst., at the Chapel Royal of the Savoy, by the Right Rev. the Bishop of Southwark, D.D., assisted by the Rev. H. Grantham, Canon of Chester Cathedral, and the Rev. Paul W. Wyatt, the Chaplain, Henry Spawforth Holt, M.A., B.C.L., of Gray's Inn Square, Solicitor, to Rosa Mary, the widow of the late Augustus George Hubbuck, formerly of Elmstead Lodge, Chislehurst.

WYLIE—HALSEY.—On September 28th, at St. Philip's Church, Georgetown, British Guiana, Angus Wylie, M.A., M.B., B.C. Cantab., second son of Dr. G. Hamilton Wylie, of Hampstead, to Kate, youngest daughter of D. N. Halsey, Brighton.

Death.

MAY.—On September 25th, at Falmouth, Joseph May, M.R.C.S. Eng., L.S.A., in his 69th year.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

DURING the last fortnight several of our contemporaries—human, not journalistic—have attained that height of felicity which a medical student presumably reaches when he becomes entitled to place eight letters behind his name. The GAZETTE begs to be allowed to add its congratulations to the many which the fortunate licentiates have by this time received. It ventures to express the hope (which for a Guy's man is tantamount to the conviction) that the new members of the faculty will be as happy in their life outside the hospital as they have been as students of this Foundation.

WE regret to announce the resignation of Dr. J. F. Sykes, who is retiring from the post of Lecturer on Public Health and Hygiene. Dr. Sykes, whom three great medical schools, Guy's included, may claim as a student, accepted the post of Lecturer on Public Health on the retirement of Dr. George Turner in 1895. As a Guy's man he has done much to keep up the fame of his old medical school. He has been Milroy Lecturer of the Royal College of Physicians, and is Howard Medallist of the Royal Statistical Society, while as Medical Officer of Health for one of the most important London districts his public services are well known. With us he laboured under the disadvantages which are incidental to the lectureship that he held. Public Health is not a subject that profoundly appeals to the average student, and the short course of lectures hardly gives the lecturer an opportunity of becoming personally known to those who attend his classes. Those, however, who have listened to Dr. Sykes will always recall with gratitude his kindly help in clearing up difficulties, and with pleasure his manner of making his subject interesting and attractive by means of illustrative anecdotes or quotations. His retirement is a distinct loss to the teaching staff of the hospital, but we are sure that it does not mean a complete severance of his connection with Guy's, and that we shall be able to welcome him in our midst on many occasions in the future.

WE are indebted to our correspondent, Rashleigh Peter—and incidentally to the Cobham Cat—for an interesting item of historical information regarding the Clinical cat hunt. The present generation of Clinicals no longer hunts cats; probably it considers the hunting of tubercle and other bacilli quite as exciting and less body-wearing. But there was a time, it appears, when the hospital premises were overrun with stray cats, of the mangy, mischievous mad-mouthed variety, that wandered into the ward kitchens, and even dared to penetrate into the sacred precincts of the counting-house, and generally ran amuck on the roofs. Against these the Clinicals waged war—a war of extermination, tempered with a good deal of mercy. Cats found without definite means of support, disreputable felines owning no master or mistress, and void of even such elementary principles of honesty and sobriety as ordinary domesticated cats might be supposed to possess,

were destroyed, and their tails were kept as trophies in the Clinicals' sitting-room. When a stray cat whose owner was known was found, it was sent home with a label round its neck, on which was inscribed the legend, "Spared once," and it is on record that in one case a particular tabby was sent back no less than four times, after which it passed out of history. A few of the more attractive-looking and better-behaved specimens that were captured became pets, enjoying a peaceful and privileged existence under the protection of the nurses; the rest became study rugs or wall ornaments. We have had an opportunity of seeing one of the old photographs depicting the results of an organised cat hunt. It shows the Clinicals in the foreground, each armed with his special instrument of extermination, while in the rear is a trophy of cat skins and tails, surmounted by the mummy to which our correspondent refers in his letter. There is also extant a chair cover, made up of no less than thirty cats' tails, centreing round the tawny yellow tuft which came from "Sandy MacPherson," a Thomas who in his time was the chief of the felines warred against by the Clinicals.

ONCE more the Students' Club is indebted to the generosity of Dr. Pavy for the means of carrying on the practices in the Gymnasium. Dr. Pavy has again given his usual donation to the Gymnasium funds, and the secretary desires us to state that the practices will be held as follows:—Boxing, Tuesdays, 4 to 6 p.m.; Gymnastics, Thursdays, 4 to 6 p.m.; Fencing, Fridays, 4 to 6 p.m. We are holders of the Gymnastic Cup, and the committee looks to all who are interested in the welfare of the Gymnasium to keep up the high standard of excellence which was attained last year, by attending the practices and making active use of the facilities which the Pavy Gymnasium affords.

DR. H. C. MANN has been appointed Assistant Physician to the Evelina Hospital for Sick Children.

THE Honorary Secretary of the British Medical Temperance Association writes to us to state that the Council of that Association is anxious to enrol, as "Student Associates," all medical students who are, or are willing to become, total abstainers. The Association is an influential and, in many ways, a representative one, and we gladly draw attention to the announcement which it makes in our advertisement columns. The desirability of becoming a total abstainer is a point which each one will settle for himself, and doubtless the majority of students have already made up their minds on the matter. To those who are still trimmers, wavering between Omar Khayam on the one hand and Sir Victor Horsley on the other, the arguments which the Association puts forward may prove helpful. "A brain unaffected by alcohol," writes the honorary secretary, "can always be relied on to do its best in an examination or an emergency."

THE next meeting of the Pupils' Physical Society will be held on Saturday, November 10th, at 8 p.m. Mr. F. W. Morton Palmer will be in the chair, and Mr. J. L. Rankine will read a paper on "The Influence of Guy's on Medicine in England"—a subject which should appeal to every Guy's man. We desire to repeat what we have stated on more than one occasion, that every student is a member of the Society, and as such entitled to take part in its discussions and debates. To men in their first and second years the clinical and pathological evenings may not directly appeal, but the reading nights, when papers of more or less general interest are discussed, may be profitably attended by the most junior of us, and the Secretaries and Presidents will cordially welcome new speakers.

THE inaugural meeting of the University of London Union Society will be held at the University, South Kensington, on Friday the 16th inst., at 8 p.m., when addresses will be delivered by the President, Sir Edward Busk, the Vice-Chancellor of the University, and others. The objects of the Union are to hold debates and to maintain a library and reading rooms. Membership is confined to graduates and undergraduates of the University, and the Union has been formed "on the lines of those existing at Oxford and Cambridge." All particulars may be obtained on application to the Assistant Secretary, Mr. D. W. Bell, 20, Maxey Road, Plumstead.

THE General Meeting of the Students' Club on Tuesday last gave an opportunity to some of the members to draw attention to a much needed addition to the club rooms—a telephone. At present the student who wishes to make use of this modern abomination has to go outside the hospital to do so, since the front lodge communications are not available for club members. The majority of metropolitan hospital clubs are in direct communication with the chief exchanges, and for several reasons it is desirable

that our club should possess a similar advantage. A telephone would not entail a large initial outlay, and a small charge made for using it would not be objected to. Under the circumstances we trust that the committee will consider Mr. Mandel's suggestion as soon as possible.

To Mr. Ormond, the retiring Secretary, members owe a debt of thanks which the unanimous vote at Tuesday's meeting can hardly pay in full. The duties of the Secretary, as Mr. Cameron will find, are not light, and they take up some time and entail a good deal of worry, especially when there are grievances flying about. Mr. Ormond gave personal attention to the needs of the Club, and was responsible for many improvements in the rooms, and the committee and the members generally will regret that he is unable to continue to act as secretary.

Appointments.

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants in the Medical Wards.—Messrs. E. P. Joynt (Dr. Taylor); M. M. Earle (Dr. Hale White); C. A. Basker (Dr. Pitt); E. P. Minett (Sir C. Perry).

Clinical Assistants in the Surgical Wards.—Messrs. J. H. Mayston (Mr. Symonds); J. L. Rankine (Mr. Dunn).

Ophthalmic Dressers.—Messrs. M. J. Rattray, J. E. Prentis (November 1st, Mr. Eason); G. F. E. Allison (December 16th, Mr. Eason).

Surgeons' Dressers.—Messrs. C. E. Price, L. T. Baker, J. F. Young, R. C. V. Edsall, T. Evans (Mr. Golding-Bird); W. G. Pinching, A. W. Ewing, R. P. M. Roberts, L. K. Edmeades, A. H. St. John (Mr. Symonds); A. C. Dickson, C. H. Mills, H. Stott, M. E. Ball (Mr. Lane); H. E. Perkins, F. W. Hogarth, C. G. Douglas, L. T. Dean, R. G. Chase (Mr. Dunn).

Obstetric Dressers.—Messrs. R. Evans, R. J. Reynolds, H. Joste Smith (Dr. Horrocks); G. F. Hardy (Mr. Targett, November–December).

Civil.

Scott, Graham, M.R.C.S., L.R.C.P. Lond., has been reappointed Anæsthetist to Great Ormond Street Children's, the Royal Dental, and Central London Throat, Hospitals.

Naval.

Staff-Surgeon Murray P. Jones, R.N., is appointed to the *Wildfire*, Surgeon A. R. Thomas, R.N., to the *President*, additional, for a three months' course of study at West London Hospital, and Surgeon C. H. Dawe, R.N., to the *Vernon*.

Dr. W. T. Parker Douglas, of Speen, Newbury, has been placed on the Commission of the Peace for the County of Berks.—*British Medical Journal.*

The Treatment of Haemorrhoids.

CLINICAL LECTURE BY Mr. SYMONDS.

February, 1906.

Gentlemen,—I propose to make a few practical remarks upon hæmorrhoids or piles, one of the most common and also distressing affections of the rectum. To understand the causes of this complaint you have only to consider the venous mechanism of the lower part of the rectum and anus, and the effect upon these structures of constipated motions, of purgatives leading at one time to a hard action, at another to frequent and loose discharges. To prevent the formation of piles, and to relieve the condition where not too advanced, we have but to so alter the habits of life as to secure daily unaided emptying of the lower bowel.

Piles have been divided into internal, external, and mixed. This is more or less artificial, for so far as I can see there is always a varicosity of the veins of the mucous membrane, above a pile situated under the skin at the anal margin. I do recognise an external pile as a distinct complaint, *i.e.*, a tender red hard swelling just at the anal margin, due to thrombosis of a vein. The hard clot can be seen, and if the skin be divided and the clot turned out, rapid recovery will ensue, or it will subside under a hot fomentation. It is painful while it lasts, and throbs like a boil. But I cannot consider the hypertrophied folds always to be found below the true or internal piles as separate entities, and as giving rise to symptoms apart from the others.

The true pile, then, is composed of varicose veins, enlarged arteries, and some new vessels. When of long standing there is a development of new connective tissue.

Clinically, piles come before us in various ways; usually several masses protrude, cause pain after defæcation, and often bleeding. They protrude, and there is increasing difficulty in securing their return. The patient has no time for palliative treatment, and comes into hospital for operation.

The great success following operation fully justifies its frequent performance. There are cases, however, where less severe measures are effective. In some cases, if the patient can lie down for half an hour after the action of the bowels, he may be able to avoid operation. This is a simpler plan than attempting to secure an action at night, which patients have generally found difficult to carry out.

Prolapse of a single pile on making a slight effort may occur without any pain, and when the patient can replace the protrusion and lie down whenever replacement is attended with difficulty, little more than inconvenience may arise. In those obliged to spend some hours at work in business, whatever the condition of the part may be, the venous dilatation will spread, the protrusion will increase, and the mass will become thrombosed. More especially will this be the case where constipation occurs. I want you to gather, if you please, that the prolapse of a single mass on defæcation, or an effort, while it is a great inconvenience, is not necessarily painful, and will be often endured by men till the effort required to protrude the pile is so slight that the mass is so frequently outside as to soil the clothing with mucus.

In these cases there are always other piles, but one finds that where a patient has objection to an anæsthetic and declines a full operation, complete relief can be given by removal of the mass that protrudes A medical friend of mine had such a condition, and moreover had had more than one attack of thrombosis, necessitating his laying up. As he had the greatest objection to an "operation," I suggested the application of the cautery under cocaine. This pile could easily be forced down; when he played golf, for instance, it would descend at the critical effort of the drive. When a moderate protrusion occurred he would lean against the end of the club and push it back; when more severe he was obliged to return to the club-house or bear the inconvenience. It would come down on lifting a heavy weight, or if he slipped a step, and so on.

This pile, from frequent protrusion, was lobulated and pendulous, and could easily be replaced. I here recommended removal under cocaine. The pile was injected with half a grain of cocaine dissolved in three teaspoonfuls of water. Then an electric cautery point was driven deeply into the pile in various directions, and the pile returned. This patient kept on his back for a week, and took medicine to secure a soft but not a loose action for this period. The pile has never returned, and some six years have passed since the treatment.

In an exactly similar instance, the same proceeding was adopted, with equally gratifying results. In another instance three large piles were removed by ligature after isolating the pile by division of the mucous membrane. This proves, then, removing the chief masses will, as you see, be sufficient to give relief. The point is that one frequently-protruding pile determines the formation of others. Remove this and the process of development ceases. Let me give you one more instance of treatment of this kind giving relief and enabling important undertakings to be accomplished, which could not have been carried out had a full operation been undertaken.

A lady, on the point of starting for a fishing trip, was laid up with a painful thrombosed internal pile. It was clearly but one of several, but the others were not involved at the moment. Operation, in this instance the only logical course to adopt, was declined from fear of the dangers from more or less unreasonable impressions, and uncertainty as to how soon she would be able to journey.

Under cocaine the pile was freely and deeply punctured with the electric cautery. Shrivelling with some separation of small sloughs took place, and in a week she left for her journey. Very soon afterwards a hunting expedition followed in Africa.

The lesson I wish you to learn from such cases is this, the relief and even cure that may follow such simple proceedings. I have no doubt whatever that pile operations are carried out much too extensively in many cases, often unwisely, and I would even add unnecessarily. Let it be remembered that many patients pass through a period of hæmorrhoidal trouble, obtaining complete freedom by careful attention to the bowels and altered habits of life. In such patients remove, if necessary, any prolapsing pile and the rest may be left. Let me add that if you later adopt some such method as I have described above, inject freely with the following solutions:—

Beta eucaine	... ...	gr. iii.
Sodium chloride	. . ...	gr. xii.
Distilled and boiled water...		ʒiiiss.

This is safer than cocaine, and is the formulæ adopted by Barker for the larger operations, such as radical cure of hernia. You can use it for circumcision, and promise the patient the operation will be painless.

Bleeding piles.—Hæmorrhage is one of the symptoms of hæmorrhoids, and yet you will be surprised to find how infrequent it is as a serious matter. It may be said to occur in three forms. In the simplest, some dark blood is found on the material used for cleansing the part, or is noticed in the pan. In others of this class the clothing is stained. The amount is of no moment, except as an indication that the time has come when the patient must regard the matter as important. In others there is at

the time of evacuation a rush of blood, even a noisy rush. Such patients will tell you that they often feel better after such a loss. When it is occasional, no harm comes, but when the loss occurs two or three times in a week, anæmia begins, and operation must be pressed upon such a patient.

There is a third form, more important, because more insidious, and also because it occurs, so far as I have seen, chiefly in young women. There is a form of pile, or so-called "pile," which is unattended with pain or protrusion, or even rectal uneasiness. On examination, one sees a vascular papillary ulceration in the mucous membrane, just within the internal sphincter. Bright arterial blood escapes freely in handling the part. This is the so-called "bleeding pile." It is rather a vascular papilloma, or, perhaps, more correctly, an open vessel in a somewhat rugose fold of mucous membrane. For illustration, I would compare it to the bleeding vessels seen on the septum nasi, the difference in appearance being due to the difference in the mucous membrane; or, again, to the condition of mucous membrane seen in some cases of hæmatemesis. These cases have been cured by the application of nitric acid in former days. Now, the most effective remedy is to excise the area with scissors, and insert a couple of catgut sutures. The cautery, benzoline or electric, is equally effective, and the latter can be applied under eucaine injection. The patients are often anæmic, and though they know that blood has been escaping almost daily, have not regarded it as of importance and have been too sensitive to call attention to the occurrence. You must, in fact, in investigating anæmia, inquire for this particular cause. A month in bed is sometimes necessary to complete the recovery.

Most people make the diagnosis for you, and more medical men have, I believe. been misled into the treatment of cancer and other ailments in this way than in any other. Every man seems to think that anything wrong with the fundament must be due to piles, and so he tries the vaunted remedies, or brings his diagnosis to a medical man, who, if he omits to make an examination for himself, and orders treatment, may find he has been as foolish as the patient. Malignant disease in its early and operable forms has unfortunately often been overlooked in this way. Never be too busy to examine the part complained of, or, again, think you are respecting a woman's natural reluctance to examination by agreeing that investigation is unnecessary. You will find that the opportunity you have in your own mind only deferred may not occur again for some months, the patient being content with the treatment advised and not seeking advice again, when you, to your dismay, find inoperable cancer. I have sketched no uncommon case in these remarks, and such cases have been brought to me by most careful men, who were the first to see the gravity of the error.

You may find an ulcer above the sphincter, where from its position it causes little pain; or, even more important, you may find some malady of which hæmorrhoidal venous dilatation is but a secondary effect, such as vesical irritation, or again, in women, uterine displacement or disease. Some years ago a young lady was brought to me for piles. There was also some frequent micturition, which was looked upon as secondary by her own medical attendant and by me. The piles were removed, but without relief, the vesical symptoms increased, and, to shorten the history, I may say that after some three or four years I removed a left tuberculous kidney, and subsequently a tuberculous ureter, and that now, quite eight years after, she is well and in actual work. You must learn from my experience, and not overlook such a reflex cause. The diagnosis in this case was for a long time rendered difficult by the absence of pus in the urine.

Another important error may arise from mistaking the piles, or, as I would prefer to call them, polypoid masses, found at the anal margin below a rectal stricture for simple hæmorrhoids. Here is a specimen from our museum showing the typical cicatricial so-called syphilitic stricture of the rectum. Notice that in this, as in all the similar specimens, the female genitalia are shown. You will not find this condition in the male—a proof that it is not a syphilitic disease at all. Much labour has been employed to prove this disease syphilitic. The true and very reasonable explanation is that the gonorrhœal pus infects the anal mucosa, and so the rectum in women, by flowing backwards, while in the male it cannot do so. It is a gonorrhœal stricture. This by the way, however. I exhibit the specimen to show you these hard polypoid masses. Felt in the living subject they are hard and permanent, and painless, characters that at once distinguish them from piles, and yet it is for piles that such patients will come to you. A digital examination of the rectum—an observation never to be omitted in any case of piles—at once settles the diagnosis. There is no use in removing these polypoid masses, they are due to obstruction

from the cicatrix and will return; moreover, they do not heal kindly, and besides, it is the stricture that demands treatment, not these painless though somewhat inconvenient projections. Yet I have once seen such a case operated upon, and whether from their removal or from splitting of the stricture by the digital examination, or from both, the patient died of infective periproctitis.

In the Out-patient room suspect every man and every woman who comes complaining of piles of having condylomata, and you will never omit to examine without also and at first inspecting. These raised wedge-shaped folds radiating from the anus are characteristic. Sometimes more elevated, but always outside; always, when of long duration bi-lateral if not circular. They often bleed on defæcation, thus resembling piles, in another particular the secretion also soils the clothing. Often have I seen such patients present themselves with the parts smeared with gall and opium ointment.

Once only have I seen a condition that, for want of a better explanation, was attributed to gout. The patient was a medical man over sixty, of rather full habit. Projecting from the margin of the anus were several large smooth masses, with somewhat square bases. The surface was unbroken, and there was no secretion; otherwise, being hard and free from any sign of inflammation, the resemblance to a new growth was obvious. They also might have been produced by syphilitic infiltration. This latter explanation was excluded for several reasons, and remedies useful in gout were employed. In a short time the parts were restored to the normal condition.

On examining one man I discovered a pedunculated growth—a fibrous polypus of small size. This protruded easily, and was removed after ligature. The relief was immediate and the piles did not give trouble for some time, and had greater care been practised the patient might have avoided the larger operation which I subsequently performed. These fibrous pedunculated bodies are probably due in the first place to venous dilatation, later becoming indurated from frequent constriction by the sphincter. In the patient above referred to, as well as in a lady, the lower end of the polypus just protruded from the anus and caused irritation as long as it was down. In this way it probably determined the development of piles.

An "attack of the piles" is a very painful malady indeed. The protruding mass is held by the sphincter, and what could be returned easily by the finger now remains outside. If such a patient could at once lie down and elevate the buttocks, subsidence in most cases would take place before coagulation occurs. Once this happens, then follows increased swelling, with inflammatory exudation, and replacement is impossible. The purple, or, it may be, black and sloughing pile, is seen exuding thin sanguineous mucus, and surrounded by swollen anal skin. Or there may be one pile on either side, and occasionally an anterior or perineal pile. It is no use trying to replace such a protrusion. You apparently succeed in applying a pad or bandage, but on the first effort, or on a cough, down it all comes. From the nature of the swelling, involving as it does the skin of the anus, the pile cannot be replaced. I have seen much suffering caused by attempts to effect reduction by the medical attendant. Put such a patient on his back, raise the buttocks on pillows, and apply hot boracic fomentations, and give, if necessary, a full dose of morphia. In a few days subsidence will follow as a rule. When the pile has sloughed it must come away, and a slow recovery of two to three weeks must result. Is it wise to operate in this acute stage? I see no objection in doing so, and have operated on several occasions with not only immediate relief, but with permanent benefit. The first objection is that of septic infection, and this at one time deterred me; but no such complication arose, the cases, indeed, recovering almost as quickly as others. I have confidence in advising the operation. There is a danger from the swollen condition of removing too much skin, but to avoid this requires only a little judgment. For the same reason special care is necessary to avoid injury to the sphincter. Suppose you are not prepared to operate in such a case, can you give relief that may be of permanent value also? To this I would reply, that full dilatation of the sphincter under ether will relieve the spasm, encourge the return of the venous circulation, and so promote recovery. Moreover, the complete rest has a permanent influence for good upon the varicose tendency.

There are several methods in vogue for removing piles when an anæsthetic is given. Personally I follow Salmon's method of ligature, removing only what is necessary, always leaving some part of the normal mucosa if possible, and it generally is possible. As a rule five piles require removal, in many cases only three. In a typical case there will be one large pile on either side and one in front. A smaller one will be found posteriorly, and the fifth will be a smaller fold which had better be removed. The

method of ligature requires to be carried out with accuracy. After dilatation of the sphincter the cutaneous margin below each pile is seized with forceps to expose the interior more freely. Then the pile is grasped in ring forceps, *i.e.*, practically tongue forceps, and so grasped as to be sure the muscle has not been included. Then with scissors the division is made along the cutaneous junction, and the sub mucosa, with its vessels, divided. The dissection is carried on partly with the closed scissors. Then the mucous membrane is divided longitudinally on either side of the pile up to its internal limit, usually one inch or one and a quarter inches from the cutaneous margin. You must then feel for the artery supplying the pile. It should run down the centre of the flap of mucous membrane and sub-mucous tissue, containing the varicose veins that have been raised. Having ascertained its position, it is held between the finger and thumb of the left hand while the division of the pile is made from each side at the point selected. Thus a neck is formed, and round this a silk ligature is placed, cut short and the pile divided well beyond the ligature. At once a catgut suture is passed uniting the skin, from which any projecting fol l has been removed, and the mucous membrane, or this may be postponed until all the piles have been removed.

Suturing in this way facilitates healing, and does not, as one might imagine, lead to puckering and protrusion of the mucous membrane left undivided between the piles. Carried out in this way, there should be little or no pain during recovery, and the action of the bowels on the fourth day should not be particularly painful, provided the purgative be a brisk one. Spasm of the sphincter—the worst of all the pains after operations on the rectum —will be prevente l by effective dilatation of the sphincter. Its occurrence is proof that dilatation has been imperfect. It is well to make this before full anæsthetic relaxation has been reached, and if the muscle is felt to yield suddenly as if a ring had been broken, you may be sure of a practically painless recovery. When this sensation has not been experienced, the stretching must be more prolonged to be effective. The patients, as a rule, have no pain beyond some smarting and throbbing. For after-treatment, the best local dressing, and the most comfortable, is a boracic fomentation. It picks up the serous exudation, softens and soothes the tender cutaneous margin, and being frequently changed, does away with odour. On the fourth night give two pills containing in each one grain of blue pill, a quarter of a grain of extract of hyoscyamus and four of compound colocynth. A saline next morning will secure a free action. If the purgative be not strong enough, and there be hesitation and niggling, the pain will be severe. If, again, there be several actions, there will also be pain. This pill is the most satisfactory remedy, and is the one recommended by the older Allingham. In our wards I have had to submit to castor oil, and I must say that the experience of the sisters in Job and Lydia is strongly in favour of this old-established remedy. Given early on the fourth morning, followed by a hot drink, the action is frequently over in two hours. The necessity of another such purge must be avoided. And, for this, I find nothing better than confection of senna and sulphur in equal parts. One teaspoonful, more or less, at night, according to the necessities of the case, should give a single motion each morning or every other morning. On the eighth day the finger should be passed well into the bowel, to stretch the parts and ascertain that no contraction is taking place. On this day the patient may, if inclined, to get up and walk a little, and then lie down. It is better not to sit in easy chairs for another four days.

At the end of the second week most patients are nearly healed and may be allowed, if sufficiently recovered in general health, to leave the hospital or go out for a drive or a walk, as circumstances permit. Complete and sound local recovery does not take place for four weeks. This will be modified one way or another by the extent of the operation. When, therefore, you give ligature as the method of operation you must describe what you mean, for you see it is more than ligature. Very different from the old operation when the pile was perforated with a needle carrying a thick silk and tied in two halves. the sphincter being not infrequently included. I have not met with any case of contraction after operation, and I need hardly say that a great number of cases have passed through one's hands in twenty-five years. I have seen contraction, and most lamentable contraction, after ligature, and know one case now where a bougie has to be worn every night; and I have known a case where a number twelve catheter could only just be passed. This is the result of careless operating, and does not affect the value of the method.

The clamp and cautery is in some hospitals in London employed, I understand, almost exclusively. It is a sound method, gives good results, and is unattended with hæmorrhage. I think there is more pain afterwards,

and there can be no doubt that healing is slower. The method was established by Henry Smith at King's College Hospital, and for years in London was practised almost universally.

I must mention the method of removing a ring of mucous membrane, the pile-bearing area, introduced by Whitehead of Manchester. This excellent proceeding in which the mucous membrane is sutured to the skin, has been widely adopted. Time does not permit of my describing it to-day, but of this method I would say, that it is unnecessary in the majority of cases, that it involves a considerable loss of blood, and that some of those on whom this operation has been performed have complained of loss of control over flatus, due probably to loss of sensation. The primary union and rapid recovery claimed for this operation cannot always be secured, and personally I prefer the method of ligature as described to-day. It is quicker, quite as effective, and is not open to the objections that I have named, as in my own opinion exist to Whitehead's.

Guy's Physiological Society.

A MEETING of the Society took place on October 22nd. The Secretary read a letter from Dr. Pembrey stating that he had obtained a gift of books for the Society from the Association for the Advancement of Medicine by Research. A vote of thanks to the Association was proposed by Mr. Mollison and carried unanimously.

A paper was read by Mr. H. Gardiner on "Physiological Laws applied to Sociology." The paper dealt with the origin of primitive societies, and compared it with the origin of the lowest living forms of matter. An interesting analogy was drawn between the formation and development of the social and the human body as regards structure and function. A considerable number of instances demonstrating the close analogy existing between the two was given, a rather striking example being that between railway systems and the human arterial and venous system. Evidence was given to show that social evolution had proceeded along the same general lines as evolution in the animal kingdom. Very considerable analogies exist, too, between social evils and human disease. In conclusion, it was held that as in the cure of human disease the physiological laws which are being violated must be first ascertained, so in the improvement of society the primary principles which are being violated must be discovered and their observance compelled by legislation.

The paper was followed by a discussion, and the meeting closed with a vote of thanks to Mr. Mollison for occupying the chair.

W. S. HIBBERT,
(Hon. Sec. and Treas.)

Owed to My Masseuse.

An Effusion.

Fairest exponent of the art
Abstruse of "Therapeutic Rubbing"
(That is, "To beat the injured part,
And leave the Patient nearly blubbing")—

With vigorous ease and graceful skill
You kneaded me—my knee did need it—
And patiently belaboured, till
Yours very truly all but bleeded!

So thanks to breezes in the Park,
And your manœuvres complicated,
Beneath my poor patellar Ark
The synovitic Flood abated.

* * * * * *

At writing verse I'm not adept,
But for your kindly flagellation,
Of gratitude sincere accept
This sadly lame interpretation!

S. W. D.

Notice.

THE GULL STUDENTSHIP IN PATHOLOGY.

The Gull Studentship in Pathology falls vacant upon January 1st, 1907. Intending Candidates for election may obtain full particulars upon application to the Dean.

HERBERT FRENCH,
Honorary Secretary to the Board of Electors.
30th October, 1906.

Pass List.

UNIVERSITY OF OXFORD.—DEGREE OF DOCTOR OF MEDICINE (M.D.)—W. L. M. Day.

UNIVERSITY OF CAMBRIDGE.—DEGREE OF BACHELOR OF MEDICINE (M.B.)—O. V. Payne.

The Committee for the Study of Special Diseases announce that Mr. G. W. Nicholson, M.A., B.C., of Jesus College, Cambridge, and Guy's Hospital, London, has been appointed to the R. C. Brown Scholarship in Special Pathology.—*British Medical Journal.*

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—GRANTED LICENCE IN DENTAL SURGERY.—W. A. Helyar, P. V. G. Pedrick.

OCTOBER, 1906.

SECOND CONJOINT EXAMINATION.—F. R. L. Atkins, T. F. Brown, A. E. P. Cheesman, A. L. George, W. L. Hibbert, J. R. Perdrau, C. G. Sprague, F. C. V. Thompson, C. Witts.

FIRST CONJOINT EXAMINATION. PART IV. PRACTICAL PHARMACY.—M. M. Earle.

Guy's Hospital Debating Society.

The opening meeting of the Debating Society was held in the College Smoking-room on Saturday, October 20th, Dr. Savage in the chair. The minutes of the last ord nary and the special general meeting were read, but exception was taken to the latter by Mr. O'Callaghan, who objected to the meeting as being illegal, since he had not been present. He had, indeed, only been given three days' notice in which to prepare a speech for that occasion.

Mr. Brookhouse then proposed: "That this House believes that England has now reached the summit of her greatness." In a brilliant speech he assumed the rôle of Cassandra, always prophesying woe, yet prophesying truly. History was an exact science. The speaker completely took the House out of its depth by his easy re erences to ancient history. The downfall of Greece was due to the growth in power of the democracy, and was there not an increasing number of labour members in the House of Commons? As to commerce, our exports and imports had increased, but that was due to our position as agents in commerce. Yet later he stated that our carrying trade was declining, so it became hard to see how it could explain the increase of our total trade. Finally, he foresaw forces at work acting towards a great decentralisation; just as the Spanish Empire in South America had become a multitude of little States, so would the British Empire. He sounded the death-knell of great nations.

Mr. Fuller opposed the motion. The colonies were the sign of our greatness. The reason Rome and Greece lost their colonies was the utter lack of patriotism in their colonies, which were regarded as so much booty to reward a successful legion. Not so the English colonies, *vide* their help in the South African war.

Mr. Cox, whose opening, "Mr. President and Gentlemen," was reminiscent of a familiar orator of previous years, made an excellent speech. It was true he was on the side of an unpopular cause, but we were all going down hill, and Ireland was leading the way. "Colonies," he quoted, "are fruits that cease to cling when they are ripe." He then quoted bitterly from the "Decline and Fall of the British Empire," and later from Dr. Shadwell's work on "Drink." "All predominant races are given to strong drink. The abstemious nations are all decadent, the progres-ive ones all drink. . . . The energy and enterprise of the Welsh are concentrated in drunken Glamorgan; drunken Scotland produces the most enduring, capable, and succe-sful pioneers in the world; drunken Ireland is the mother of the quickest-witted race known to our age." And England was becoming sober!

Mr Stout demanded to know why there should not be labour members in Parliament. Was not labour the bulk and backbone of the country? Did Greek help a man to govern? They talked about colonies; had they ever been to any? (No, and shudders.) If we were so decadent why did Japan seek alliance? If we were to go down, who was to go up? Ireland was all right, or would be when she got Home Rule.

Dr. Savage then put the matter clearly before the House for discussion.

Mr. O'Callaghan began to quote Kipling. In the intervals came sepulchral laughter from beside the fireplace. Let the House consider the breeding of yeast. True it was invented by a German, but had it not been improved by an Englishman? (Applause.)

The Junior Secretary insisted on calling the honorary propo-er by name, and was repeatedly pulled up. He concussed the House with a Latin quotation, and dealt severely with the proposers' arguments.

Mr. D. Reynolds asserted that the colonial contingents in South Africa had behaved like bushmen, and could only be employed as scouts.

Mr. Wood next delivered a very optimistic speech.

Mr. Ball objected to doing work on principle—especially anyone el-e s.

Mr. Scott wisely pointed out that there was a national tendency to be neurotic and exaggerate every little untoward incident. There was too much argument "ex pede Herculem."

Mr. Minett pointed out that the foremost nation could hardly hope to progress so fast as the more backward ones. Disintegration of Greater Britain could be avoided by Imperial Federation. The colonial contingent in South Africa may have acted chiefly as scouts, but scouts were the eyes of an army.

Mr. Matthews, in the course of his speech, stated that "Scotland makes the whisky, England drinks it." (Sensation.) That the Colonials were of real value was shown at Paardeberg.

The opposer and proposer replied. The latter informed Mr. O'Callaghan that it was bread, not nations, that rose on yeast. He was almost tempted to call the Junior Secretary by name, but refrained. He quarrelled with the translation of that gentleman's quotation.

Dr. Savage then summed up in his usual excellent fashion, and the motion was put to the House and (despite Passim) carried by 20 votes to 18.

A vote of thanks to the President was carried with acclamation.

Over fifty members were present, and the meeting was characterised by the number and excellence of new speakers.

Bo ks Received.—Atkinson's Golden Rules of Medical Evidence, Brown & Ritchie's Medical Diagnosis, Freyer's Enlargement of the Prostate, Moynihan's Retro-peritoneal Hernia, Lindsay's Diseases of the Lungs (2nd edition), Thomson's Submucous Excision of Deviations and Spurs of the Nasal Septum, Phillips' Diseas s of Women (4th edition), Cooper's Uses of X-rays in General Practice, Gaceta Medica de Costa Rica for September, *The Practitioner* for November.

Some Statistics of Enterectomy.

No.	Age.	Sex.	DISEASE.	Duration.	OPERATION.	RESULT.
1	$\frac{7}{52}$	F	Intussusception	4 days A	6 inches ileum resected	D. Lived 7 hours
2	$\frac{7}{12}$	M	Intussusception	4 days A	6 inches ileum. Murphy's button	D. Same day
3	39	M	Growth of colon. Intussusception	1 year C	End to end anastomosis	R. Dischd. 4 mths.
4	37	M	Double stricture of jejunum. ?Tuberc'e	21 mths. C	End to end, 12 inches. Murphy's button	R. Dischd. 2 mths.
5	20	F	Fæcal fistula	1 mth. C	End to end, 24 inches	R. Dischd. 2 mths.
6	$\frac{7}{12}$	M	Intussusception	24 hours A	End to end, 9 inches	D. 20 hours
7	36	F	Obstruction by band	7 days A	End to end. Murphy's button	D. 24 hours
8	19	F	Obstruction by mesenteric cyst	3 weeks C 38 hours A	End to end, 3 inches ileum. Murphy's button	R. Dischd. 2 mths.
9	$\frac{9}{12}$	M	Intussusception	24 hours A	Resection. ? Extent	D. 10½ hours
10	56	M	Growth of sigmoid	9 days C & A	1½ inches resected after a Paul's tube had previously been inserted	R. Dischd. 1 mth.
11	40	F	Obstruction by band	7 days A	Resection. Murphy's button	D. 14 days
12	$\frac{4}{12}$	F	Intussusception	12 hours A	Resection, end to end	D. 4 hours
13	48	M	Peritoneal abscess	3 weeks C	Resection of colon, end to end	R. Dischd. 6 weeks
14	$\frac{4}{12}$	M	Intussusception	3 days A	End to end. Murphy's button	D. 12 hours
15	54	F	Carc. cæci	6 mths. A & C	Excision of cæcum, end to end. Murphy's button	D. 14 hours
16	$\frac{10}{12}$	F	Intussusception	3 days A	End to end. Murphy's button	D. 4 hours
17	54	M	Malignant jejunum	5 mths. C	? End to end. Murphy's button	R. Dischd. 2 mths.
18	75	F	Volvulus colon	3 weeks C	End to end. Resection colon, 27 inches. Murphy's button	D. 30 hours
19	72	F	Carc. sigmoid	7 mths. C	Colotomy previous to excision of sigmoid	R. Dischd. 2 mths.
20	35	F	Carc. sigmoid	2 years C	Colotomy previous to excision of sigmoid	R. Dischd. 2 mths.
21	36	F	Carc. colon	4 years C	Colotomy previous to excision of sigmoid, 1½ inches. Murphy's button	R.
22	49	F	Strang. fem. hernia	24 hours A	Resection, 27 inches, subsequent to relief of obstruction	R.
23	56	M	Carc. colon	4 years C	Resection of colon. Button slipped on 7th day	D. Peritonitis
24	33	M	Strang. ing. hernia	3 days A	Resection 27 inches ileum	D. 10 hours
25	52	F	Carc. cæcum	4 years C	Resection of cæcum. Some colon	D. 6 days
26	55	F	Strang. fem. hernia	6 days A	1 inch ileum resected. Murphy's button	R.

Some Statistics of Enterectomy—*continued.*

No.	Age.	Sex.	DISEASE.	Duration.	OPERATION.	RESULT.
27	32	F	Strang. fem. hernia	7 days A	4 inches ileum resected. Murphy's button	D. 10 hours
28	55	M	Strang. fem. hernia	8 days A	Some ileum resected	D.
29	58	M	Strang. ing. hernia	3 days A	11½ inches ileum. Murphy's button	D. 11 days
30	61	F	Strang. fem. hernia	4 days A	Ileum, 3 inches resected. Murphy's button	D. 24 hours
31	47	M	Carc. sigmoid	? A on C	Resection of sigmoid. Murphy's button	D. 24 hours
32	43	F	Carc. colon colotomy	? C	Resection of prolapsed colon	R.
33	15	M	Intussusception	5 days A	18 inches ileum, end to end	D. 5 hours
34	58	F	Strang. fem. hernia	5 days A	Some ileum. Murphy's button	D. 8 hours
35	21/12	F	Intussusception	2 days A	Ileum, 4 inches resected. Murphy's button	D. 9 hours
36	36	F	Strang. fem. hernia	3 days A	Ileum, 2½ inches resected. Murphy's button	R.
37	13	F	Fæcal fistula	3 years C	Some ileum resected	R.
38	66	F	Carc. sigmoid	? C	Resection sigmoid. Murphy's button	D. 3 days
39	46	F	Strang. fem. hernia	4 days A	2 inches ileum resected. Murphy's button	D. 6 days
40	30	F	Strang. ing. hernia	5 days A	Ileum, 6 inches resected	D. 3 days
41	62	M	Carc. sigmoid	14 days A on C	Sigmoid resected	D. 9 days
42	46	M	Strang. ing. hernia	3 days A	Colon, ? length. Murphy's button	R.
43	47	F	Carc. colon. Intussus.	? days A on C	Some colon resected, end to end	D. 3 days

M = Male. F = Female. C = Chronic. A = Acute. R = Recovery. D = Death

These Statistics were collected with the idea of supporting the contention that it is very risky to perform enterectomy during acute obstruction, and when the bowel is in a paralysed condition. In the above list there were only two recoveries among the acute cases.

The obvious criticism that such cases will probably die in any case is hardly a valid one.

H. F. BELL WALKER.

Papers by Guy's Men.

Recurrent Swelling of the Dorsum of the Hand associated with the Appearance of Bruising following a Blow. By Theodore Fisher, M.D., M.R.C.P. Lond. (Illustrated.)—*The Practitioner* for October, 1906.

A Series of Cases Treated by the Injection of Bacterial Vaccines. By Edward Turton, M.D., B.Sc. Vict., M.D. Leeds, and Alfred Parkin, M.D., M.S. Lond., F.R.C.S. Eng. (Illustrated.)—*The Lancet*, October 27th, 1906.

The Rubber Teat and Deformities of the Jaws. By Tom F. Pedley, M.D. (Illustrated.)—*Britis Medica Journal*, 20th October, 1906.

Two Cases of Acute Obstruction, Intestinal and Pyloric, in the same Subject, caused by Hair Balls. By A. Scott-Turner, M.R.C.S. (Illustrated.)—*Ibid.*, 27th October, 1906.

Hospital Treatment of Curable Cases of Mental Disorder. By Edwin Goodall, M.D. Lond., B.S., F.R.C.P. Lond.—*Ibid.*, 27th October, 1906.

"Words and Things." *

Address delivered before the Students' Physical Society of Guy's Hospital at the Opening of the Winter Session, 1906,

By T. Clifford Allbutt, M.D. Cantab., F.R.C.P. Lond., F.R.S., &c.,

Regius Professor of Physic at the University of Cambridge, &c.

Gentlemen,—When your courteous secretaries did me the honour of inviting me to address your society in its opening session of this year, I did not realise that my acceptance was committing me to an occasion so great as this. But still they kindly assure me that a momentous oration is not required of me, not even a careful discourse on some chapter of medicine, but rather a few words of general conversation—gossip may I call it?—suitable to a students' discussion society. Indeed, a bolder undertaking at this time would have been impossible for me; yet I am not without apprehension that, after all allowances, my salute to you will be of a very light artillery.

Yet light as my address was to be, it must not be unfitting to its intention; and, not without reminiscences of public debates, it came to my mind that I might endeavour to promote the economy of your own by an attempt to distinguish the relations of words to things; for we are all agreed that it is to things that we desire to approach, and not to occupy ourselves in unsubstantial forms, or shadows of things.

In brief discourse—for an address may be relatively brief and yet tedious—I desire to avoid those regions of metaphysical thought by which we are landed in remote and irreducible antinomies. It is not inconsistent, I hope, with a proper mistrust of common-sense to assume for current purposes an objective world and a subjective; that we are we, and things are things outside us. In this necessary assumption our concepts are a transcript of the external world, and are useful in so far as they coincide with what I must venture to accept as "reality." Curiously enough, the human mind is not as the "mind" of animals seems to be, a mere print off of the outer world; it has an amazing liberty, or licence, of speculation, largely independent of phenomena, at any rate a faculty of conceiving the world much other than it is; in part a dreaming faculty, in part an abstracting faculty; or, in other words, a compact of imagination and intellect. To make for himself an idea of this big world as it is must be the work of ages: meanwhile mankind has for working purposes this faculty of making little provisional images of it, which enable him to make corresponding provisional progresses. But, as by enlargement of needs and experience, mankind is prepared for larger and larger conceptions, the surviving images become idols, and these, like other idols, have from time to time to be smashed. Some men foresee more clearly the imperative iconoclasms; others see more clearly the converse side of progress—namely, that tradition, sincerely used and understood, is better than no provisional scheme of life at all. In the less mature periods of culture man is so proud of his mind and of the little worlds it fashions that he attaches himself most tenaciously to one or other of these images rather than to the objective world; and furiously resents any scrapping of his subjective worlds, however inadequately they may have come to represent the stage of contemporary experience. It is a hard lesson that from generation to generation man must be incessantly rebuilding himself more and more in the image of God. By things, then, I mean what we suppose to be an external world, after the manner of which we are, or ought to be, continually remodelling our ideas; by words, on the other hand, I mean signs, arbitrary and very variable signs, by which we endeavour to indicate and converse with these ideas. In a full view of symbolism these signs would appear in more than one kind; for instance, they must include drama, painting, and music; but at present we will confine ourselves to those signs only which we call language—to literary signs, and of these chiefly, of course, to scientific prose.

In contemplating the nature of linguistic signs, a picturesque modern writer has figured man as standing on some point of vantage from which the vast and swift streams of the universe are seen—if there be a brother Silurian present he will recall the lines:—

> "Like a vast shadow moved in which the world
> And all her train were hurled."

—and the watcher, while the stream whirls past, endeavours to throw labels upon its infinite and fleeting parts; some of the labels stick rightly, others stick in wrong places; others, again, float along space as if attached to something, but signify nothing. It is because many of our labels, floating as showily as the rest, ride thus upon nothing, and thus deceive us, that I am moved to our present conversation.

Not unmindful, as I have remarked, of debate in other places, permit me to quote the following paragraph from "Coningsby":—"There was indeed a considerable shouting about what they called Conservative principles, but the awkward question naturally arose—what will you conserve? The prerogatives of the Crown, provided they are not exercised; the independence of the House of Lords, provided it is not asserted; the ecclesiastical estate, provided it is regulated by a commission of laymen. Everything, in short, that is established so long as it is a phrase and not a fact." So deftly did this master of persiflage lay bare the habit of men to feed themselves with words instead of with things, diverting themselves, as an old writer has put it, "by going about to catch the wind in a net."

But politics, you may say, is a game; and to use words as chaff for the passerine voter is part of the game. Well, let us turn to letters; there is in our day a new actor—the literary man, as distinguished from the historian, the philosopher, the naturalist, the grammarian, the romancer, the poet, and so forth, whose

* We are indebted to the Editor of the *Lancet* for permission to reproduce this paper.—Ed.

profession is not with making things but with dressing them. Not themselves profound inquirers into things, their occupation is to deck them with gauds, I had almost said to titivate them; fetching words from far to decorate what they have not created. Or, to advance these ladies' maids of literature from the green-room to the stage, we may compare their manipulation of words to a show of marionettes and their "criticisms of life" to a charade. It was no bitter cynic who said that "persons who cannot afford the time to experiment write books on the subject." These embellishers of other people's creations or researches, this smart redressing of things in precious words to catch the attention of the readers of magazines, may be a condition of democracy, and, if we may hope that it does more harm to the journalist than to the public, it must do harm to both in divorcing manner from matter, in regarding "style" not as in the substance of the thing itself, but as an applied decoration; the thing itself being, in two of its aspects, the personal experience and this experience modified by the author's temperament. This last quality it is which is properly Style. When the style becomes but a frippery, clothing somebody else's stuff, affectations, insincerities, and false notions breed and abound. The humblest reporting is better than exuberant orchestration of other men's themes.

To turn to another side of the matter; those of us who are trained in science, reverent as we are to the memory of Aristotle, cannot help seeing that, after a widely different fashion indeed, he occupies himself too much with words. This defect in him it was which endeared him to the spinners of verbal webs in the scholastic period of modern Europe. Like them their oracle too often, when seeking for causes, sought them among words. Aristotle would not be the august man he is had he not laid a masterly hand also on things, especially on zoological things; but in many spheres he fails to perceive how artificial are the logical bridges by which too often he carries himself over anything but solid ground. We are told to remember in excuse that Aristotle lay under the disadvantage of knowing but one language; that had he enjoyed the advantage of a classical education, had he been educated in the comparison of words, he would have become so far detached from them as to have discovered that words are but labels; that labels are very liable to get shifted, and in no case make the museums they interpret. That this defect in the work of the greatest mind perhaps that the world has seen, was due to his confinement within the boundaries of one tongue, I hesitate to admit. Many great men, comparable perhaps with Aristotle in native intellect, although like him confined to one language, have compassed ends if less vast yet more enduring. Such men have lived, it is true, in polyglot times, but personally not a few of them had enjoyed either no linguistic culture, or but a nominal degree of it. Nor in our own times, indeed, do I observe that those whose linguistic culture has been the most liberal have distinguished themselves chiefly by an emancipation from words and a devotion to things. I can conceive, indeed, that the contrary thesis might be maintained.

Now to dwell upon things rather than on words is the method of observation, which in its fulness contains the experimental method, and although it would not be fair to say that the Greeks never attained the use of this method, its practice by Aristotle, by his pupil Theophrastus the botanist, by Archimedes, or Hipparchus, never attained anything like the maturity to govern their conceptions. In so brief a bloom of culture such a consummation would scarcely be conceivable. Both before and after the Socratic period the pursuit of knowledge was mainly not by this method, but by the method of public discussion. The perversions latent in this method we can see better than greater men than ourselves could perceive them at the time, and the method of public discussion and pursuit of truth by verbal controversy became almost more rampant and more perverted in the polyglot mediæval universities than among the monoglot Greeks, and with less excuse. But this subject I shall return to presently, in some reflections upon words as logic.

An insight into what South called "the fatal imposture and force of words" may be received from that profound reverence for names which we observe in children—including grown-up children—in contemporary savages, and in folklore. An inquiring child is dissatisfied until he is told the name of a thing; savage man still believes that to get at the name of a person is to gain a power over him. To know the name was to have the kind of power which was obtained in the effigy, the power vicariously to injure the person. Thus persons or gods would take false names in order that the real name might be sheltered from malevolence, or that the worshipper might be spared the fulmination of the name. In Jacob's wrestlings at Penuel we note this importunity for the name. The whole Aryan family, Professor Rhys tells us, believed at one time not only that his name was a part of a man, but also that it was the part of him which is termed soul, the breath of life. The Irish, at a far later date, treated the name as a substance. I need not hark back to my quotation from Disraeli to remind you that even to-day almost any reform is possible so long as names are not touched; so persistent is our habit of regarding the name as the vital part of identity. And unfortunately we go on building with names when the things are altered or wasted away, as sometimes beavers pathetically persist in constructing dams and canals when the water has gradually dried up, or has changed its course. If we realise how a word may survive to oppress and mislead us, as other ghosts do, when the underlying thing has dissolved, we shall be more careful in setting up imposing names, as we physicians are very prone to do, until we are sure that the thing is there; and in no case shall we let a name give an absolute value to temporary or developing notions. The urgency of this lesson in medicine I will illustrate hereafter.

Meanwhile we must acknowledge that there is a strange magic in names, a charm of which we could not wish

even our greatest makers to be devoid. Not old women only take comfort in "Mesopotamia." It is easy even on the instant to be sure of finding many an illustration of this charm upon the poets. Assuredly Homer did not write the following words—as commentators say—just as a "catalogue," but greatly for the joy of the words (forgive my reading the original; the sense does not matter):—

ὁὶ δὲ Πύλον τ' ἐνέμοντο καὶ Ἀρήνην ἐρατεινὴν
καὶ Θρύον Ἀλφειοῖο πόρον καὶ εὔκτιτον Αἰπύ.
καὶ κυπαρισσιεντα καὶ Ἀμφιγένειαν Ἐναιον
καὶ Πτελεὸν καὶ Ἕλος καὶ Δώριον, ἔνθα τεμοῦσαι
ἀντόμενοι Θάμυριν τον Θρήικα παῦσαν ἀοιδῆς,
Οἰχαλίηθεν ἰοντα παρ' Εὐρύνου Οἰχαλιῆος,
.....κ.τ.λ.

Nor Milton these:—

"Next Chemos, the obscene dread of Moab's sons,
From Aroar to Nebo and the wild
Of southmost Arabim; in Hesebon
And Horonaim, Seon's realm, beyond
The flowery dale of Sibma clad with vines,
And Elealé to the Asphaltic pool."

Paradise Lost, I., 406.

From such sonorous cadences, half-sensuous, half-imaginative and memorial, words which, like Juno's eyelids or Cytherea's breath, or like that homely one "Daffodil" falling as fragrant from Dis's wagon, words which are emotions rather than thoughts, we pass easily on to consider what else words carry to us. Words are fraught for the mind with three qualities at least—with Sense, Meaning, and Significance.* By Sense we indicate the direct intention of the very words themselves, although the sense is often dependent more or less upon the context; moreover, we know that many words have more than one direct sense; for instance, "a man of parts" may be a man of talents, or an actor; and so forth. By Meaning we indicate that which the author wished to convey; a burden unfortunately too often very different from the sense. For instance, to-day I read, "The planter must work hard for nine years, and only in the tenth year will he make profit"; a hard saying indeed until we guess that the writer did not mean the sense, but meant the planter would not make any profit until the tenth year; but thereafter we trust an annual profit. Thirdly, by Significance we mean something more diffused and impalpable than either sense or meaning. For instance, few sentences are more significant than this of Hippocrates on a form of sterility which the Scythians attributed to divine visitation. "For my own part," says the father, "I think that this malady is divine, as all maladies are divine, that no one is more divine or more human than another, but that all are divine alike."† It is fallacious, no doubt, to endue the words of an ancient thinker with modern significance, but it is no unreasonable licence to read in these words an anticipation of the deeper thought of our own day on the conception of God. Or, again, say that in man the male mamma has virtually no outward channels, might seem in sense and in meaning an obvious and almost insignificant statement, but does it not become highly significant when we remember that primary cancer of the male mamma is a very rare event?—so rare that I have never seen it. Such examples illuminate Significance better than any description can do; and perhaps, indeed, it is difficult to so define significance without implying also something which the reader brings with him; certainly a great part of his significance the author may not have deliberately foreseen and intended; it is often something intuitive, springing from his sympathy and imagination, as well as from his systematic purpose. Whether Carlyle was right or wrong in attributing to Mrs. Mill "much unwise intellect," Mill himself illustrates the distinction of Significance in this, that the significant part of his writings is generally felt now to lie less in his systematic doctrines than in a sympathetic humane aspiration which, in an intimate but intangible way, animates almost the whole of his works. This quality of Significance is then indeterminate; it has a certain remoteness and ideality, and if cribbed in bare propositions is apt to evaporate. Comparatively and respectfully speaking, Macaulay has always seemed to me among great authors as deficient in significance, as of more accuracy and learning than of insight, as lacking in purport beyond his purpose, and in the ideality which, apprehending and living in the growing edge of things, sees and signifies them *sub specie matris creatricis*. For it has been well said that the whole globe of the earth is but a nutshell in comparison with its significance. To distinguish yet more closely, I might speak of Carlyle and Ruskin as authors who have significance almost in inverse ratio to their formal and often very vague or fallacious systems. Their faults were diffuseness, incoherence, lack of concentration and selection, but not insignificance. The significance of Carlyle was his contempt for phrases, his grip of reality, of things; for this significance his stories were but parables. I wish we could feel sure that even in the very strongholds of science we are in no danger of this inveterate disease of mistaking words for things.

But before entering upon the use of words in natural science, I would regard for a moment their use in logic. The basis of logic must consist in a confidence that the minds of men, if not identical, have a community of nature; that they are so far alike that they can harmonise and make mutual appeal one to another. The personal equation, the individual temperament, is only so various as to give a piquant variety to our agreements. We are as different instruments in one orchestra, each with its own quality, but all with the same tonality and the same gifts of congruity. Locke said of logic that one cannot apply the syllogism until the truth is ascertained, and that then one does not want it. The answer may be, nevertheless, that having apprehended a truth we apply the syllogism to discover and formulate the deftest, most economical, and most effectual mode

* Students of this subject must not forget among nearer sources to recognise their debt to M. Bréal and Lady Welby, whose treatises on "Significs" have brought this subject within the reach of the general reader.

† De aeris, &c., par. 22.

of expressing it. The danger is lest we should not use logic thus clear-sightedly, but should be tempted to suppose its manipulation of words to be a manipulation of things, and lest the constructor of syllogisms should suppose himself a creator of truth. In the Middle Ages men fell into this kind of aridity; they forgot that as we abstract we are departing from things, and passing into the land of symbols, out of the turmoil of natural events, colours and contingencies, into a land of artificial schemes, and may too readily leave observation for ingenuity, and things for formulas. Thus we are prone to suppose that truth is to be revealed by the conflict of argument, and, what is worse, to construct "thought cages" for ourselves and to hop contentedly about in them.

Of a certain ample head of a College in Oxford—a "warm man," as the phrase goes—it is told that on returning from a lecture of Bonamy Price, then professor of political economy, on the meaning of money, the Warden exclaimed, "Mere logomachy, mere logomachy! I know"—slapping his breeches pocket significantly—"I know what money means!" The warden was aware of the peril of abstractions. Undoubtedly, however, in the last hundred years we have been devoting ourselves, and with marvellous success, not of course to get rid of abstractions, but to divest them of substance, to appraise their value as devices of thought, and to determine their functions; yet we are, notwithstanding, still a prey to formulas and accept words for things. And we err in two curiously opposite directions: we attribute substance to names, and then, because by this factitious solidity they impose upon us, we leave them standing while we are no less busily, if unwittingly, engaged in pulling to pieces the concepts to which they were applied. Thus names become flimsier than ever; no longer corresponding even to concepts they are but the rags of thought. If thought is to have any consistency we must keep a jealous eye to the precise connection of names and concepts; if on the contrary we keep dissolving, enlarging, or altering the contents of our mental museum and, while being still the slaves of names, leave the labels as they were, we cannot be saved from a double confusion.

Some of you who have heard my teaching before must forgive me if I repeat my insistence that the name of a disease is not, as it is continually regarded, a thing. There is no such *thing* as typhoid fever, as angina pectoris, as spleno-medullary leukæmia, and so forth; the things so called are Wilkinson, Johnson, and Thompson, who after their kinds are afflicted not alike, but within such limits of similarity as to lead us to class them together and to form a general conception of them. And yet still we overhear at learned societies physicians, whose shoe-latchets I am not worthy to unloose, contending, even with heat, whether this name or that is a "morbid entity." Now "entity" is anyway a bad word, as words can be bad; it was born badly, and has kept bad company. It was born to signify that reality of substance at one time was supposed to underlie abstract names, and in these ontological circles it has moved ever since. If we are to speak of "entities" in disease, these must be not the names, nor even our concepts, but the things—the thing Thompson and the thing Wilkinson in certain phases of their being. The moment we depart from these objects we desert the names of things for the names of abstractions in which no entity can lie, the name being but a label to denote a somewhat arbitrary and ideal group of characters never perhaps manifested in nature as a whole, but to which certain patients are continually approximating. I do not pretend for a moment that we can do without abstractions; without them reasoning would be impossible: our safety lies not in avoiding reason but in being quick to recognise the tendency of ratiocination to carry us away from the only pregnant subjects of reason—namely, from things, with which reason should habitually and steadily concern itself.

It is only by examples that discussions such as this can be made clear. In epilepsy, for instance, we observe a vast number of persons attacked in modes not identical but similar; modes, however, the features of which shade off by insensible transitions into the features of other groups of symptoms; so that our concept is not of an absolute, but only of a relative uniformity. This we should remember when we use the name; as we remember that when we call a certain group of stars Orion, or Charles's Wain, that there is no rigid division between these star groups and those of the neighbouring constellations. Now epilepsy is no more an entity nor an absolute idea than Orion; it is the name of an arbitrary group, so separated for the convenience of the thinking faculty of finite beings. So far as to the nonentity. But, as I have hinted, we proceed, having set up our entity, to treat it as savages treat their images, to shake and to harry it at our caprice. Surely, having accepted a name for a group, we ought to keep to it; and yet we find our friends daily calling widely different concepts by the same label of epilepsy; for instances, puerperal convulsions, uræmia, Jacksonian convulsions, certain insanities, and so on, events so very different both in nature and grouping that, if we give them also the same name of epilepsy, we shift our things without shifting our labels. Or, again, consider angina pectoris; if there be a uniformly recurrent group of clinical features, it is that for which this name was invented; yet we shift the label about, now to spasms of neurotic women, now to vague and casual cardiac pains or discomforts consistent with almost any kind of heart disease. Most grotesque, perhaps, are the "pseudo" compounds, such as "pseudo-angina," "pseudo-leukæmia," and the like; think for a moment of calling scarlet fever "pseudo-measles"! Yet it is not very long since these two maladies were distinguished. It were but too easy for me to prolong such a list of ambiguities due to shifting our labels or to shifting our concepts under the labels; but these must suffice. Remember that when it is asked if such and such a group of systems be a "morbid entity" or not, that is nice the

day of William Ockham we have given up entities, that the question is now one only of convenience of reason; but that when we have once agreed to give a certain name to a certain morbid series of events—arbitrarily agreed, that is—then we must stick to our label; for if the label is to be shifted about or the things under it shifted, all accurate reason comes to an end. One may walk dryshod from one disease to any other, yet on the other hand it is no less true that, because of the large differentiation of his parts and organs, in Man his morbid processes tend to a corresponding uniformity of recurrence; his symptoms recur in similar groups and orders —symptom-groups or syndromes as some nosologists would call them, who are desirous of some name finer than the old term "disease," or possessed with the tenacious notion that a disease is a real something in itself. But diseases are not even species, such as cats and toads, but abnormal, though not altogether irregular behaviours of animals and plants. Once more; not content with this ambiguity we entertain the converse notion also that, give it a name big enough, we can make a disease of a symptom. For example, bradycardia and tachycardia, symptoms, in their degrees, of many a morbid process, impose upon the unwary student as themselves "morbid entities," a notion twice removed from the truth.

Our debt to the morbid anatomist is so profound that in our gratitude we are forgetting that the pathologist is not a clinical physician; indeed, that so long as he is denied right of access to the living patients in the wards he is becoming more and more a man in a balloon. His laboratory is full of things, no doubt, and hitherto he has dwelt soundly in things; but chiefly in dead things, not in things at work; yet our only real things are processes. Now, the pathologist has been largely concerned in undermining our clinical concepts; and so invaluable a service has he done us in compelling us to occupy ourselves with things rather than words that we are gratefully disposed to believe he can do no wrong. Hence, without protest, we have allowed him to re-label some of our things with his labels, often to our advantage, but at least sometimes to our error. For instance, the pathologist has seduced us into allowing him to use the label of arterio-sclerosis as the name of a disease. Now, if for the physician a disease is a series of symptoms recurring with such uniformity that we think it convenient to distinguish it with a name, arterio-sclerosis is not such a series; it is not a series of symptoms at all; it is a result, a statical result, of foregone symptoms, probably of more than one series, and, if so, probably itself a compound name even in pathology. The physician who recognises the imperative duty of dwelling in things ought to guard himself from being supposed to mean only things that stand still; his sphere is, on the contrary, with things in motion—he is a master of dynamics. To take another instance, the physician, unfortunately, it is true, has given the name of "granular kidney" to a certain series of symptoms, and a very characteristic series it is; headache, nausea, high blood pressure, anæmia, emaciation, debility, retinitis, vomiting, coma, make it a very imperfect summary of them. Now the pathologist has taken to the use of this clinical name for every kidney more or less granulated by fibrosis; but is he justified in saying of any such case to the physician, I mean with a clinical connotation, that the "kidneys were more or less granular"? For, in this sense the adjective is not clinical, it is but roughly descriptive of a dead organ; yet the bandying of it between the pathologist and the physician is a daily source of error and confusion. The clinical problem is whether the fibrosis was but a local expression of a general atrophic fibrosis or originated and consisted in a very slow toxic necrosis of the secreting structures of the organ with a substitutive fibrosis.

But I must hasten on to another direction in which logic is apt to generate a reliance on words to the neglect or misinterpretation of things. In logic we are able to separate qualities of things, and to place them in divers categories so distinct that we are seduced into regarding these factitious categories as things. For purposes of analysis we may, and indeed we must, often study divers aspects of a thing separately, but only as an artificial and temporary expedient; not, as we have seen, so as to conduce to a habit of endowing these several aspects or qualities with independent life, or so as to blind us to their essential and active unity and integrity. We have hampered ourselves, for example, not only by considering structure and function severally as a temporary device of thought, which is not illegitimate, but also by dwelling on the one to the exclusion or neglect of the other. Thus absorbed in the discoveries of morbid anatomy pathologists for many years forgot the genetic processes in which their specimens had their origin. Both in pathology and in clinical medicine, moreover, logical definitions were formulated which tied up living medicine in ligatures as stifling as those in which Andrea della Robbia swathed his babies on the Loggia of the Hospital of the Innocents. For in biology definitions can never be more than summary descriptions. In a higher sphere of speculation bitter controversy raged for centuries over the purely logical distinction between faith and works; the one being of course a function of the other. So, again, in psychology analytical divisions are made between Intellect, Imagination, and Will, and these factitious divisions find their way into practical matters to the prejudice of the gravest interests of education, sound criticism, and the conduct of life. Even yet it is hard to convince people that these distinctions are purely logical, having no counterpart in function, and that every action consists in a fusion or rather in the integrity of all three qualities. That these qualities exist in various proportions in different individuals does not prove the independence of each of them any more than of various noses; but the assumption of such an independence, as I have shown more at large in my little book on "Professional Education,"* has thwarted, vitiated,

* Macmillans, 1906.

and even sterilised our theories of mental life and growth. In forgetfulness of the imagination, with which he himself was so largely endowed, Francis Bacon forgot likewise the part of this great faculty in scientific discovery, falling into the narrow view of it as a mere intellectual stringing of fact to fact, as on a necklace; whereas imagination is the pioneer faculty, always beckoning intellect on; too often, if the sisters do not walk hand in hand, feverishly and fancifully. An apple falls from a tree, everybody's fact; it was Newton's large imagination that saw in it a symbol of universal gravitation. Darwin may have collected no greater pile of facts than some other naturalists; at first, indeed, specialists for the most part fought against him; but Darwin saw the facts common to him and to them in the light of a vast imagination. Much of the work which is done in our laboratories and dignified, not improperly perhaps, with the title of research, much plotting of curves, much watching of levers and thermometers, nay, not a little morphological dissection and cabinet making, are really little more than clerk's work. To be no more than learned in facts and opinions, with whatsoever skill in methods, is not to make knowledge. Bundles and files of facts are not science until the man with the formative, let me say the creative, insight comes along, who by the fusion of intellect and imagination seizes upon the significant facts, which give him the lines on which to build up these aggregates of materials into a conceptual edifice. Emil Fischer waxes very bold, and speaks of the intuition which is the essential gift of the organic chemist. It almost makes one's mind ache to try to conceive the mental detachment, the power and compass of the imagination which realised the heliocentric astronomy; a conception which, for the ordinary man, flouts all earthly experience. Yet we were warned from Olympus a few weeks ago that "it is the business of science to present the facts and to let them alone"!

No less factitious and eviscerating is the verbal division between "pure" and "applied" science, as if we could have a science of nothing; such was the divorce between medicine and surgery with which I have already dealt at some length.* The homily of all this is to insist that as we abstract we depart from things; and the wider the successive abstractions, the farther we are leaving things behind, the more and more are we eliminating those contingencies in which processes, organic and inorganic, essentially consist. Science is not creation but analysis of creation; and the strange adoption of the word "synthesis" to signify the uttermost epicycles of abstraction is an instance of the confusion wrought by misuse of words. General principles, then, are not applicable to things until we have reconstructed all or much of those very complexities in real processes which we have been at the pains to abstract. In mediæval times so fastidious were logic and abstraction that practice became a vulgarity, and he was the greatest teacher who carried his pupils farthest from things; a departure from reality which brought about a grievous revenge. Since Galileo we have been discovering that our abstractions must incessantly be tested, braced, and articulated with facts; that is to say, with systematised experience.

Yet, I repeat, the dangers of abstraction have by no means vanished even in the ranks of natural science; the soaring vanity of the human mind is seen still among the "pure scientists," as well as in the academic temper of humanistic students. The boast that a study is lofty in proportion to its uselessness is still heard, even in the laboratory. To the conceited distinction between pure and applied science I have already alluded. Many Cambridge scientists were so shocked at the suggestion that a brewers' research should be established among us, that the suggestion was frowned down, not because the objectors were teetotallers, but because brewing is vulgar and possibly useful. In some high quarters the establishment of engineering met at first with a like chilling reception. Medicine likewise, because it deals with things, has always been for our serener circles, a Cinderella, blooming maid as happily she has grown nevertheless. But it may be objected, surely the laboratory deals with things! Far nearer to things indeed it is, when compared with the lucubrations of former times; but the laboratory, invaluable, essential as its work is generally speaking, is apt to dwell only half in things; and nature will have no half loves. It is in the full commerce of nature and men that the problems fruitful of science arise; their events and processes, vulgar as they may be, are full of the unexpected, and it is beyond the imagination of any scientist even to conceive such combinations and emergencies unless he is conversant with things. Furthermore, if he tried never so generously to imitate natural processes and events on his artificial platform, he could not possibly reproduce them in their complexities. The navigator of models in a tank would cut a poor figure as captain of a man-of-war in the Atlantic. Thus, without periodical steeping in the world of practice, theoretical researches tend to remoteness and vacuity. It is by continual touch with Mother Nature that we renew our strength, and for her nothing is common or unclean.

It may be protested that logic has surely been an engine of progress in reason in the past, and it may be asked what is to take its place? The answer is, first, that no one desires to banish logic, but, while keeping it in a subordinate place, to remember always its artificial nature; secondly, that formal logic is now surpassed, if not superseded, by the interpretations of evolution, by a natural logic of affinities. But this is too large a chapter for our handling to-night.

So with your permission I will turn from the perils of logic to the perils of metaphor. There are certain hard-headed folk who stoutly declare that metaphor is altogether intolerable, and by the sober author must be eschewed. But unfortunately these protestants protest in metaphor, for metaphors have so intimately penetrated and grown into the very structure of language that speech without metaphor is about as possible as to jump off one's own shadow. If we consider the matter for a moment we shall see that to begin to think is to begin to

*The Historical Relations of Medicine and Surgery, Macmillans, 1905.

compare, and that this implies the use of analogies: dangerous tools of thought, it is true, but inevitable instruments in subjects of which the intimate nature or homology is yet unknown. Now metaphor is of the nature of analogy. Metaphor, however, is for illustration rather than for argument; and we shall have a care how far it takes us; especially in natural science where our very purpose is to dissolve superficial, allusive, or partial comparisons into the profounder comparisons of genesis. It is in the conveyance of relatively finished conceptions to other minds that the man of science may well use metaphor deliberately; and for such restricted purposes Huxley and many another scientific author of the highest rank have used it freely. And could a lecturer on the influence of the sun's rays desire a more convincing prophecy of their virtue than this metaphorical passage, written more than three hundred years ago by one of the greatest and least-known writers of English prose*: "Nor does [the Sun] only illuminate all these objects in an idle manner; its beams are operative, enter in, fill the pores of things with spirits, and impregnate them with powers, cause all their emanations, odours, virtues, and operations; springs, rivers, minerals, and vegetables are all perfected by the sun; all the motion, life and sense of birds, beasts and fishes dependeth on the same." And so on. Metaphor is, then, analogical argument heightened by imagination, and as such must contribute to the increase of wisdom. To defend metaphor by metaphor, I would remind you that it was not the horses of the sun but their incapable driver who caused the disaster. Metaphors, then, must be carefully chosen, must be regarded rather as illustrative than explanatory, and must not be pursued beyond the measure of apt correspondence.

For my part I think less harm is done by metaphor, which can be appreciated as such, than by equivocal words; and it is to such words, to misused or degenerated words, and to the impostures and tyrannies of words, that I would in my few remaining paragraphs, however briefly, engage your attention. Of equivocal words, and of the harm they do, there is no end. Some of you may remember the words of Plato in the Phædo that false works are not only in themselves evil, but infect the soul with evil. So in science they infect the understanding. I must run the risk of discursiveness, and point to a few of them as they come. Some words are by nature of elusive temper; thus the word "force" by its equivocations has caused infinite trouble to men of science; they have been hunting it down this hundred years, but it has not been quite cornered yet. "Law" has more mischief to account for, as by its double dealing it carries error in all directions. Day by day we see well-meaning men confusing themselves and others by ignoring that in science law is not a rule imposed from without, but an expression of an intrinsic process. The laws of the lawgiver are impotent beside the laws of human nature, as to his disillusion many a lawgiver has discovered. The word "compensation" we find frequently used in Medicine as a *vis medicatrix ex machinâ;* whereas we ought to mean that when a system in equilibrium has found itself able to re-adapt itself to a certain incident disturbance it survives, otherwise it is upset; this re-adaptation, on which its stability depends, varies not with any benevolent purpose or guiding principle, but with the intimate limits and conditions of the system itself. Other words are question-begging; such, in my opinion, is the word "mechanical" in its modern application to the cosmical order. Surely a machine is a system of tangible parts arranged to compass certain effects when it is set agoing, directly or indirectly, by human agency; left to itself it is impotent. We note the old error of Paley and the watch restored to respectability by modern philosophers. The philosopher may say that he does not intend the word to be used in its vulgar sense, but his readers do; and not only so, he himself vitiates his argument by many an implication of this meaning and speaks scornfully of a mechanical conception of the universe. "Utility," again, and its adjective "utilitarian"—what wars have been waged over these words; some disputants using them, as in common parlance, in the sense of immediate profit; others in the sense of remote profit—the old quarrel, by the way, between the "pure" and the "applied" science champions. Nay, let me spy into the citadel—into truth itself! Pilate was no "jester" when he asked—What is truth? for we have not yet agreed what the name is to mean. Is truth an absolute transcendental existence; a transcendental whole, yet in relation with us so far as to govern our ideas with an authority, as it were external? Or is it natural, partial, and relative, and to be found in the gradual establishment of a harmony between man's normal desires, and his satisfactions in experience? Or, again, does it lie simply in affirmative propositions? The word is used chaotically. No doubt, as we have seen, a word may have two or more orderly senses, to be severally determined by the context; and truth may be used by metaphysicians in the first sense, by naturalists in the second, and by logicians in the third, but if so, let this discrimination be observed. On the other hand, the word is unduly neglected when truths are called "facts." Few abuses of language are so perverse as the misuse of the word "fact." I have grown accustomed to anticipate, on hearing it, a more than usually hazardous opinion and nearly always some general statement depending upon facts; rarely, indeed, the proper sense of the word—namely, something which has happened. The word has become indeed so ambiguous that it is no longer trusted alone but is guarded as "actual fact." Theory, on the other hand—the highest range of scientific truth—is used almost as a term of contempt. An eminent writer and man of science wrote the other day—"this which was never more than a theory"—never, that is, more than conjecture; or shall we say fad, craze, or moonshine? We cannot defend ourselves by pleading that we have more care for the thing than for the word. We might as well try to collect butterflies and beetles in sublime indifference to their

*Works of Thomas Traherne. Edited and published by Dobell, 1906.

names and qualify ourselves for the giddy supremacy of Toinette—"Moi, je suis l'inexactitude même." The common use seems to be that my opinion is a fact; your opinion is a theory. Thus dull Britons are encouraged to vilipend the systematic results of investigation and to content themselves with rule of thumb.

But as I have spoken at length of these words "theory" and "fact" in my little book on "Composing Scientific Papers"—a book which I hear is well known to you—I will not weary you with these or more examples of false words. I may just allude to the words, abundant in politics but not confined to it, which force us by their demoniacal power into grooves; such words as socialism and individualism, free trade and protection, and so forth. The word "specialist" is scarcely wanted, for "expert" is a better one, and "specialist" has become "groovy" in the sense of a narrow and warped, and perhaps not altogether disinterested observer, at best a harper on one string. Yet in truth Nature is one and indivisible, and the way into her fields if long and hard is not narrow, and from whatsoever gate we enter in, if our eyes are open, spreads to us as wide a view. Some words again are so pompous that they exercise a spell over us by their self-assurance, such as embryocardia, meiopragy, mithridatisation, and the like—words in buckram we may call them—for which we quickly snatch up somebody's missile of "Scheinphysiologismus." Other words and phrases again are flimsy rafts, which take us, like the Jumblies, to sea in a sieve, with tobacco pipe masts and sails of pink paper; thus one may set sail on such a sieve as "the disease is no doubt due to a faulty metabolism, giving rise to automatic intoxication," and similar cant, which I will not pursue. Then there are thimble-pea words, which may be popped in anywhere, such as "fatty heart" in clinical diagnosis. And there are the great multitude of South's "impostors"; psychopathy is full of them; some wit has called them "sandheap words." And there are some quiet words which distil boon or bane insidiously, of which we may take disease unwittingly, as our forefathers accepted their bodily infections. Metaphorical words are most apt to have this quality in them, as when one ingenuous disputant called a constituent element a *residuum* and the other called it a *quintessence!* Comparatively harmless are the mere tokens with which some traders are satisfied; such currency, for instance, as "tabby-cat striation," and the like, which are frequently offered to us on the examination exchange.

Nihil in intellectu quod non prius in sensu: mind in its widest sense is, as we know, fed and built up by the senses, by the incessant streaming in upon us of outside impressions. Thus it is that animals, which within their narrow and immediate sphere live incessantly in sensation, are so extraordinarily successful in it. Their almost infallible perception and memory of experience is rather unconscious absorption than deliberate observation. We, on the other hand, by abstraction are continually tending to arrest or ignore the inspiration of these centripetal nervous streams which should not antagonise but continually conspire with thought. Reflection is imperative for us; thought is that attribute which is most divine in us; by its symbols we make the universe our own: yet if we permit divorce of thought from its materials—and it is by words that we think—if we let thoughts and words drift away from things, the mind itself—our minds individual and collective—must be surely impoverished. If we give no heed to our symbols—to our means of conceiving, recording, and formulating the conditions under which we have to design our lives and our faiths—we shall be drawn almost as inevitably into error as if our observations were themselves erroneous. Watts, who with the creative faculty of an intellectual imagination, had in supreme degree the artist's power of penetrating, selective observation, and his mastery of expression, was ever counselling this incessant openness to the senses, with their burdens of things and experience. And, as our minds are thus enlarged, as they become not less and less but more and more sensitive to impressions, our words must be kept moving and continually tested for appositeness and values. Our most fundamental assumptions must be always under reconsideration, our rules of evidence made stricter and stricter, our appreciation of values more and more refined, and our principles of selection more and more severe.

And not our facts only, but also the *litera scripta*—documents, traditions, authorities—must lie always under question. Without the past the present cannot appear to us in its true perspective nor be fully interpreted. Without the history of medicine, and study of the words in which it is contained, modern medical ideas cannot be fully understood nor the place and genius of our profession rightly known. Medicine is not a game to be played merely with knowledge, coolness and dexterity, but a calling to be pursued as humanly as the humanities must nowadays be pursued scientifically.

Finally, for this debating society our discourse on Words and Things has had little result unless I have led you to see more clearly that the purposes of it ought to be an unwearied contribution and verification of things; a vigilant criticism of insidious plausibilities, ambiguities, unveracities, and insincerities of language: and not only a care for the choice of words lucid and exact, but also a training in the use of them in a significant context. As you grow in wisdom you will see more and more clearly that the gain of debate is not to bowl each other out, but to translate the values of each of your minds into the permanent values of truth. The last counsel I leave with you is that you shall take me as an awful example of talking too much; and remember also, each and all of you, the saying of Izaak Walton that "words are men's daughters, but God's sons are things."

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Payment is a matter of arrangement, and the fees that the GAZETTE *can offer are merely nominal, but if the writer desires any remuneration that fact should be stated.*

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

The Cobham Cat.

DEAR SIR,—With regard to mummified cats, I do not think they are at all peculiar to church vaults. They are fairly common. For many years I had one which belonged to a grand-uncle, a surgeon in Bloomsbury. It was found jammed tight into the eaves of the house between the end of a rafter and the wall-plate, where no doubt it had rushed in pursuit of a mouse or rat. My old relative used it as the knob of the bellpull in his consulting-room. I buried it after some years, as during a wet autumn it began to decay and was offensive. Another, with a mouse in its mouth, was exhibited in a wine merchant's window in this neighbourhood. Its owner told me it had been found between two casks in his cellars in the London Docks. Another I saw pulled out from under the floor of a barn in the country. The question of the finding of a dried-up cat in a wall space in a church is interesting. I have made inquiries of builders with regard to the tradition that a living thing should be enclosed in the walls and foundations of churches when building, as undoubtedly was the custom in Pagan times, and to-day is in some parts of Africa. Once or twice I have had curiously evasive answers, although generally the custom was denied. The following, however, is true:—When the church of St. Eanswythe of Brenzett, in Romney Marsh, was restored in the early seventies, the bell cote required a new oak post. The old one was adze hewn and of the period of the oldest bell in the cote, c. 1385. On digging out the footing, at the depth of six feet, a human skeleton was found in an upright position. The bell cote and its supporters lie within the nave at the west end. It is well known that Pagan (I use the term as equivalent to pre-Christian) practices existed later than the fourteenth century. I would formulate no theory, but state the fact. Burial in the upright position has occurred in much later times, the best-known case being that of Ben Jonson, but his skull was, if I remember rightly, but a short distance under the pavement of Westminster Abbey, the reasons for this position being that there was no room for the ordinary method of interment,—Yours truly,

F. WILLIAM COCK.

1, Porchester Houses, W., October 27th, 1906.

DEAR SIR,—I have been much interested in the several explanations which have been offered by readers of the GAZETTE of the cat in the Leather Bottle at Cobham. None of them seem, to my mind, entirely satisfactory. One cannot easily conceive of a cat, dying in a confined space, tenaciously gripping its prey between its teeth to the last. Nor does the theory that the cat and rat were artificially fixed in that attitude for religious reasons seem very conclusive. It is possible, of course, that the cat may have caught its prey and then have been jammed in a narrow opening, but under such circumstances it would most likely have dropped the rat. I have seen two cases of cats accidentally inured, which had probably died of starvation; in both cases the body was curled up in a resting attitude. Such cases are probably by no means rare when one considers the number of cats which wander about deserted houses, or are locked in when the family goes for its annual holiday to the seaside, but in no instance have I heard of a case in which the animal was found with its captured prey in its mouth. No doubt some of your readers may be able to cite similar cases, and I, for one, would be glad to have some more material before making up a theory on the subject.—I am, etc.,

Falmouth, October 21st, 1906. G. P.

DEAR SIR,—If it does not tire you to receive so many letters upon this subject, I should like to express my agreement with Mr. A. Alan Forty's view, that the origin of these mummified cats, with or without mice or rats, is simply due to the animal getting into a place from which it cannot afterwards get out. Many of your readers must have been to see the warehouses and vaults at the East and West India Docks; and they will, I am sure, remember the mummified cat and rat that were found jammed behind an enormous cask of sherry that had not been shifted for ages.

In February, 1901, when there was a thriving "Clinical Cat Hunt," old "Petersham" was pulled down to make way for the new Laundry at Guy's; under the boards af one of the rooms two mummified cats were found. I saw both. There exists a photograph of one of them; the mummified cat itself is now, I believe, in New Zealand, unless it has been lost by the celebrated hunter in whose possession I last saw it.—I am, yours faithfully,

RASHLEIGH PETER.

The English Disease.

DEAR SIR,—I am sure that all your readers will have appreciated Dr. Hertz's able articles upon "Aspects of German Medicine," and will be looking forward to more of them. If Dr. Hertz will permit me, however, to find one weak spot in what he has written, it is in the second paragraph of the right-hand column on page 430 in your last issue. He says, "Die englische Krankheit—the English disease—is the inappropriate name popularly given to rickets; inappropriate, because from what I saw I should say that rickets is no less common in Germany than in England." This is unjust. I thought as Dr. Hertz does, until I met Professor Recklinghausen at Strassburg, and complained to him of the name, die englische Krankheit. He asked me if we were not taught, in England, anything of the history of medicine. He asked me if I knew who first drew attention to, and gave a full account of, rickets. I am afraid I did not know. Perhaps Dr. Hertz does not know. Professor Recklinghausen told me, in Germany, what I had never

been told in England, that Professor Glisson, of Cambridge, the anatomist after whom the capsule of the liver is named, wrote the first treatise on rickets in the seventeenth century; and it was in honour of this English author of the first treatise on the subject that the name "englische Krankheit" was given.

Glisson published his treatise, "De rachitide sive morbo peurili qui vulgo 'the rickets' dicitur," in 1650, but though this disease was then modern, yet a treatise had been published before this, namely, in 1645, by Dr. Whistler, afterwards President of the College, with the title of "Paedosplanchnosteocace," from the viscera being judged the parts specially affected. . . . The cause and nature of the disorder were afterwards better explained by Dr. John Mayow in a small treatise published in 1668.—I am, yours faithfully,

19th October. TRAVELLER.

Wills and Petersham.

DEAR SIR,—In reading through the first eight pages of the new "Green Book," I became interested to know the origin of the name "Petersham" Buildings in which is located the Clinical Laboratory, etc., and also to know whence comes the title "Wills" Library. I feel sure there are many Junior men, besides myself, to whom explanations of the above queries would be very acceptable.—I am, dear Sir, yours very

INQUISITIVE.

[The Wills Library owes its name to Sir Frederick Wills, Bart., M.P., who in 1902 generously provided funds for the erection and fittings of the building. Petersham House was the name given by Mr. Treasurer Harrison to the block of buildings containing the old clinical theatre, in honour of William Hunt, one of the greatest benefactors of Guy's Hospital, whose private residence was at Petersham House, near Richmond.—ED.]

The Christmas Festivities.

DEAR SIR,—In October of last year you were good enough to insert a letter embodying one or two suggestions with regard to the annual Christmas festivities. The time of preparation for these is again approaching, and I should like to repeat that appeal for a somewhat quieter Christmas-day before the arrangements have been definitely settled.

The pros. and cons. may be briefly stated as follows:—

i. Christmas-day was not instituted as a mere day of revelry, and so some opportunity should be given for nurses, patients and students (especially the Niggers), to spend it more in accordance with the true spirit of the day.

ii. Christmas-day has always been in England a day of family réunion, and many who would be only too willing to assist in hospital festivities are thus debarred from one or the other.

iii. The patients cannot, under the old arrangements, see their friends and relations on this day.

On the other hand, if the Nigger entertainment—and possibly the Out-patient Tea—were given on Boxing-day, Christmas-day itself would be quieter, friends could come that day instead of the next, and the "entertaining staff" could spend Tuesday at home and return in time for the festivities the following morning.

Last year one argument brought against this change was that all the entertainments could not be got into the week otherwise. My answer to this is, "Why have so many entertainments?" Popular singers sing till they are hoarse, and players play till they are weary of wandering from one ward to another each afternoon.

Could not the ward concerts also be arranged more for the patients' amusement than for the multitude of visitors that throng the hospital? A post-operative pneumonia cannot enjoy four or five people sitting on his bed for two solid hours, and even the healthy ones would enjoy the concert more if the crowd was less. Would it not be possible to have, say, three or four concerts to which any outsiders could go, and then limit the crowd at the others by issuing "invitations," strictly limited in number?

At any rate, some of your readers might be able to suggest alterations which would give the patients a still more enjoyable Christmastide and all the helpers a possibly less fatiguing one.—Yours sincerely,

October 17th, 1906. "OLE NIGGER."

Reviews.

The price of books submitted for review should in every case be stated.

Handbook of Surgery. By G. B. Buchanan. (John Cronin.) p. 547.

This handbook has been written for the benefit of those wishful to revise their surgery before going up for examination. It reminds us in a way of the well-known pocket Gray, though we do not think that it compares in utility with that little book. We cannot bring ourselves to think that "Surgery" can be condensed into a list of facts as anatomy can. This book is nothing more than an elaborate list of diseases and symptoms, containing as it does the whole of surgery in 524 small pages (the other 23 are index). It naturally happens that but little is said about any one particular disease—just a bare outline of symptoms and treatment. Some affections are almost omitted altogether, as for example fracture of the upper end of the humerus, six varieties of which are discussed in half a page. As regards the actual subject-matter, compiled as it is from the well-known books on Surgery, we have no complaint.

The book as such might be of use to a beginner, but we cannot recommend it as in any way advancing the science and art of surgery.

Dental News.

THE opening meeting of the Guy's Hospital Dental Society was held on Friday, 19th ult. There was a good attendance, including a large number of freshmen, 44 members in all being present.

Mr. Bull was elected to represent the October, 1906, entry on the committee. Messrs. Doubleday, Hunt and Gibbings brought forward interesting casual communications, which elicited discussion.

Mr. E. B. Dowsett, the President for the ensuing year, was received with great enthusiasm, and his inaugural address was listened to with much appreciation. He said:—

"GENTLEMEN,—In electing me for the second time to the presidency of this society, I am deeply sensible of the honour you have conferred upon me, and I fully appreciate the great compliment you have paid me. I thank you most heartily, and I can only say that I feel now, just as much as I did five years ago when I took this chair before, my unworthiness and my incapability of adequately fulfilling the duties of such a position. And when I think of my immediate predecessor, Mr. Hopson, whose steps I am to endeavour to follow, and of the extremely self-sacrificing, enthusiastic and able manner in which he furthered the interests of this society during the last winter session, my feelings of unworthiness are so intensified that my capacity for carrying you successfully and profitably through the coming session seems to vanish into thin air. However, I will do my best. No man can do more. The history of this society is full of the records of good work done, and I trust that the session we are now inaugurating may prove as successful an effort as its forerunners. It is open to you all to assist, and I trust that every student may take an interest in the society, and that most will take an active part. And this I hope for a good reason. Learning to discuss subjects of practical and scientific interest is an education in itself, and can only be learnt in such a society as this. The educational effect upon those taking part in our meetings can indeed be very great, though perhaps but little appreciated, no doubt because the participators unthinkingly imagine that it brings them but a small step, if at all, nearer to what they fondly, though blindly, look upon as their goal—namely, the passing of the L.D.S. examination. This is wholly wrong. Success at your examinations should not be the goal of your studentship, and moreover your education should not cease with your hospital career. Education does not consist of trying to get the greatest number of facts into a student's head, but in creating a desire to know. Mr. Halliburton has even suggested that it would be advantageous to take a student's career, note-taking and attendance at class-examinations, all into consideration at his final examination, or reckoning, as it might then be called. It is often assumed that a curriculum is framed and carried out in such a way as to best qualify men for the practice of their profession, at the time of receiving their diplomas. This is, on the face of it, an erroneous idea. Every member of our profession should remain a student all his life, and the object of the curriculum is 'to produce the man, the sum total of whose work, *throughout the whole of his career*, shall be the best possible.' So many, as practitioners, fall into grooves and lie in lonely furrows, their brain cells apparently becoming fixed or inactive, that a word of warning seems not out of place. To illustrate this, there is a very good instance related of a great surgeon who remarked, on the discovery of the X-rays, that they would be of no use in surgery, as they had been able for a very long time to remove foreign bodies embedded in the tissues, and to treat fractures without the help of such things. Our present knowledge of X-rays and their uses shows how out of place and misjudged were the words of this great man. His brain cells had become fixed, and incapable of appreciating any future to this great discovery. Therefore take warning, may I beg you, and keep abreast of the times. Let your brain cells remain active and impressionable as long as they will. It is impossible to suppose that you can stand still and at the same time hold your own, and that is only looking at it from a selfish point of view, but the more educated and advanced that each member of our profession makes himself, so is the profession itself raised in status. Advancement necessarily means improvement, and good work must in time make its influence felt, and that influence must be permanent. It is essential, in the interests of the public as well as ourselves, that our ranks should be filled with men having a high sense of honour, men proud of their profession. The steady rise in popular estimation which our profession has enjoyed proves that in the main our ranks have been filled with such men, and to their patient, self-denying labours our present position is due. Go you forth, therefore, into action in the ships of education upon the seas of dentistry. Die on the last plank of honest endeavour, or come into the port of reclining years with your ensign of success flying mast high."

Mr. Hedley Visick then presented his paper on "Some Notes on the Regulation of Teeth," illustrated by means of several models, apparatus and diagrams.

The Chairman reminded the members of the prize of £1, which has been offered for the best set of casual communications presented during the session.

The next meeting will take place on November 16th, when Mr. F. N. Doubleday will read a paper on "Local Anæsthetics."

Pupils' Physical Society.

A Clinical Meeting was held on Saturday, October 27th, in the Wills Library, Mr. Macalister in the chair. Several interesting cases were shown, and much discussion followed, as in only one case did the meeting agree with the diagnosis put forward by the exhibitor.

1. Scleroderma ... ... Mr. Hamilton.
2. Disseminated Sclerosis ... ... Mr. Barker.
3. Epithelioma of Floor of Mouth ... Mr. Perkins.
4. Lateral Sclerosis ... ... Mr. Miller.
5. Growth of Lung .. .. Mr. Bartlett.
6. Spondylose-rhizo-mélique ... Mr. Knight.
7. Doubtful Tumour of Abdomen ... Mr. Hamilton.
8. Enlarged Liver and Spleen in a Child. Mr. Laidlaw.
9. A Case of Liphæmia ... ... Mr. Barker.

Sport.

Rugby Football.

GUY'S v. ROSSLYN PARK.

Played at Honor Oak Park on October 20th. We had rather a weak team out, Saunders, W. E. Williams, Archer and Digby being unable to play. The forward places were taken by Milton, Stout and Sprague, while Monaghan played half, and A. D. Williams played centre three-quarter. There was no wind, and the ground was in good condition. The Hospital won the toss and defended the pavilion end. The first few minutes of the game were occupied with kicking, neither side being able to find touch, eventually Lee found touch near the half-way line. Soon after the start, faulty passing by our backs enabled our opponents to score wide out; the kick failed. The game for some time was of a scrambling nature, then Williams made a splendid dribble, and was only stopped on the goal line. From the scrum that followed, Alcock scored, and Lee converted. Our opponents were more than holding their own. Both sides indulged in some passing which was not very successful. Once their three-quarters almost scored, but the wing man was tackled well by Gibson. Our backs then got going, and Lee ran almost up to the goal line, he drew the back and passed to Stringer, who knocked-on, losing a certain try. Jones had to retire for a short time with a slight injury; meanwhile King-Stephens dropped a splendid goal. In a few minutes half-time arrived with Rosslyn Park leading by 7–5.

In the second half our opponents had rather the better of the game, and a great many free kicks were given against us. If King-Stephens had been in his best form at goal kicking, we should have had a very large score against us. Our forwards tired very soon owing to our backs kicking up the field, and not finding touch, thus giving them an unnecessary amount of work. The play was not very scientific, forward rushes and indifferent back play being general. When the second half had not been long started, the opposing forwards rushed the ball down the field, apparently unopposed by our backs, and scored; the kick failed. The game was more even for a time, although it was confined to our half owing to the numerous free kicks against us. Eventually the Rosslyn Park backs obtained the ball, and, after some passing, scored; the kick again failed. There was not much more time left, and both sides worked hard. From a line-out, Williams caught the ball and ran from half-way up to the back, he then passed to Rutter, who scored; the kick failed. For the few remaining minutes we pressed, but no score resulted. Rosslyn Park thus left the field winners by 1 dropped goal, 3 tries (13 points), to a goal and a try (8 points).

REMARKS.—The forwards were packing too high; their packing was very bad, all going much too high. They did not follow up the high kicks with sufficient dash, and did not get round quick enough. Mullins and Alcock were the best of the forwards. Our three-quarters were by no means in form. Rutter does not appear to know the game, and never goes for the man with the ball; his tackling was very poor. Stringer's kicking was erratic and useless, his kicks never finding touch. He did not appear to play with his head, and he seldom stopped his man, as he was going too high. All the three quarters were inclined to get out of their places, and stood too far apart. Gibson's kicking was rather short, but he always found touch. He must catch the ball full toss, and not wait for it to bounce. The whole character of the game was spoiled by the number of off-sides and knock-ons that passed unnoticed.

GUY'S v. LONDON WELSH.

In this match, played at Leyton on Saturday, October 27th, the Hospital was unlucky to lose to the Welsh by a try, the score being 2 tries to 1. The London Welsh played the eight back game.

Saunders, Williams and Gibson being away, their places were taken by Lowe, Munden and Duke, while our opponents were in full strength. Guy's won the toss, and the Welsh kicked off from the pavilion end. Play settled in neutral territory until J. P. Jones got away and dribbled up to T. Jones, who saved well, and, with a good kick, found touch near our twenty-five. Stringer secured, and kicking up the field failed to find touch, and the Welsh three-quarter line got on the move. They were pulled up in our twenty-five for a forward pass, and from the resulting scrum, Monaghan was penalised for off-side, the kick just missing the posts. Lee returned to half-way. From some forward play near the half-way line, the Welsh forwards got away, but were again pulled up for a forward pass. They continued to press, and Maddocks was pushed into touch just outside our line, and from a scrum both packs went over the line in a bunch, and a try was allowed; the kick failed. From the drop out play settled at half-way, until a good kick by Jones took play to the Welsh twenty-five, only to be brought back to neutral territory by the Welsh forwards. A free kick against the Welsh was well taken by Jones, but play returned to Guy's twenty-five, where Lee and Stringer both saved well, and an excellent dribble, headed by Alcock, took the ball into Welsh territory. Lewis saved, and with a good kick transferred again to the Guy's twenty-five. Again our forwards, headed by Crook and Alcock, took the game to the other end, only to be stopped by T. Jones, whose kick did not find touch, but allowed Digby to find touch near the Welsh goal line. More forward play followed, and Harding breaking away was tackled by Duke, but transferred to Gibbs, who, in turn, sent Rowlands in almost under the posts; the kick again failed. Play was taken into the Welsh half, and a bad kick by Lewis, which lost ground and found touch just outside his own line, gave Guy's their opportunity, but the Welsh cleared. A good kick by Duke found touch near the Welsh twenty-five, and, from the line-out, Pinching got away and scored wide; Munden failed with the kick, and half-time was whistled.

The second half was marked chiefly by bullocking forward play, both sides going all out. Play settled at once in the Welsh half. Our forwards were getting the ball in the scrum more often at this period. A rush by the opposing forwards was stopped by our getting off-side. Even forward play followed, and Harding broke away, to be stopped by Stringer. Another dribble by Alcock took play to half-way, when a kick was given against Guy's for a foul. Immediately after, a kick was given against the Welsh for a man lying on the ball. Munden took the kick, and the ball just going wide, the Welsh touched down. Guy's continued to press, and Morgan was penalised for off-side, the kick again just failing. Play returned to half-way, and Harding getting away was well tackled by Duke, J. P. Jones finding touch in the Welsh half. Pinching picked up, and going strong with only T. Jones to pass, was tripped, a likely try thus being lost. The Welsh transferred play to our twenty-five, and Duke touched down. Pinching, Mullins and Hind dribbled again to Welsh territory, and the ball coming out to our three-quarters, Digby found touch with a good kick. The Welsh again got away, and Duke brought off an excellent save, after which the whistle went for time.

REMARKS.—Duke at back played a good game, he stands a little too far back, and by running away from instead of towards the touch line, would improve the length of his kicks. The three-quarter line were all good in defence, and had few opportunities of attacking given them. "J. P.," at half, was great, and Monaghan played one of the best games we have seen him play, but still does not play with his head, and shouldn't stop in the middle of a dribble to pick up the ball and look round to see who he can have a chance of going at. The forwards played as they can play sometimes; their play being well likened by a spectator to that of an Irish pack. Team:—

GUY'S.—H. L. Duke (back); L. B. Stringer, H. Lee, W. E. S. Digby, A. D. Williams (three-quarter backs); J. P. Jones, P. J. Monaghan (half-backs); R. Mullins, W. G. Pinching, A. Alcock, H. Archer, E. R. Hind, A. H. Crook, M. M. Munden, J. A. Lowe.

Referee: Mr. W. Williams.

Novelties.

Horlick's Milk Preparations.

The malted milk preparation manufactured by the Horlick Food Company has been on the market for many years, and it has stood the test of time well. The recent samples that we have had an opportunity of trying are excellent. The malted milk is a finely granular powder, which can be used in several ways. Most commonly, it is prepared as a beverage by mixing it with hot water, and adding sugar or salt to taste. So prepared it is an agreeable and refreshing drink, taken hot or cold, and its value as a food is undoubtedly very high. It is probable, however, that few know that it can be used in other ways. Spread on bread and butter it can be made into a tasty sandwich, which should prove acceptable to anyone who wants the maximum of nourishment in the smallest possible compass compatible with satisfaction for the appetite. Food in tabloid form is apt to be unsatisfying, however highly concentrated it is Horlick's, however, manufacture such a concentrated food in their Lunch Tablets, which are small discs of compressed desiccated milk and cereals. Fifteen to twenty-five of these are stated to be equivalent to a meal of ordinary food, and we have found that number amply sustaining after a day's tramp. They are easily soluble in the saliva, and have a peculiar milky flavour which is by no means unpleasant to the taste. Unfortunately they are put up in bottles, which are rather inconvenient for carriage in the pocket, and it would be an advantage to have them in a metallic or hard cardboard case for cyclists' and tourists' use. The malted milk has proved of service in cases where ordinary milk has been badly tolerated, and it is a valuable adjunct to an invalid's dietary. The company's preparations may be obtained at their London depot, 34, Farringdon Road, E.C.

Change of Address.

Dr. Edwin Goodall, from Three Counties Asylum, Carmarthen, to City Asylum, Cardiff.

Major H. St. G. S. Hore, R.A.M.C., from Birr to Naas.

Lieutenant F. M. M. Ommanney, R.A.M.C., from Woolwich to Shorncliffe.

Dr. A. Reid, from The Cranes, Tooting, S.W., to Kuala Lumpur, Selangor, Malay States.

Mr. Alfred H. Tubby, M.S., F.R.C.S., from 25, Weymouth Street, W., to 68, Harley Street, W. Telephone No. (unchanged) 676 Paddington.

Lieutenant Wetherell, M.D., R.A.M.C., from Attock to Campbellpore.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

From the Gazette's Special Pathologist.

ALL specimens—particularly those of solid tissues—should be accompanied, if possible, by a short clinical and post-mortem history, and a postal order for 2s. 6d. An extra charge of 6d. per slide is made when prepared sections are to be forwarded.

C. D. P. S., HUDDERSFIELD.—No tubercle bacilli have been detected in the centrifugalised deposit from this fluid, which is non-purulent in character.

PATHOLOGIST.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

VOL. XX., No. 480.] NOVEMBER 17, 1906. [SIXPENCE.

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Passim.

WE have Poets in our midst and Musicians, yet we have no Hospital Song. In the name of goodness graciousness, as Mrs. Nickleby would have said, why does not someone give us a "Guy's Anthem?" The mere reiteration of our name, with which we are so familiar at hospital matches, is a poor substitute. As Mark Twain remarked of the Turkish lunch, "it is good enough, no doubt, but it has its little drawbacks." One cannot cry "Guy's" over the wine glasses at a Biennial Dinner, but a good Hospital Song would not be an unfitting conclusion to the most dignified of dinners or the most impressive Prize-giving function. It is not that we have no material for such a composition. There is material enough—more, we take it, than Mr. Lehman had to work upon when he wrote those stirring verses of his "College Song" that rank among his happiest efforts. There is our past, good enough, in all conscience, to serve the most wooden-headed of minstrels for inspiration, and there is the glorious possibility of the future about which even a diligent reader of the "Zoophilist" might wax enthusiastic. The tiniest little German medical school has its pæan, ranging from the solemn Latin jubilation to the slangy drinking song that the Professor hums over his bitter and "kalter aufschnitt." The man—or woman, for was it not one of the milder sex that penned what Wendell Holmes called "the most soul-stirring of triumphal ditties?"—who gives us a good Guy's song, a really effective, vibrant set of verses, with a "carrying chorus," will make generations of Guy's men his, or her, debtors. We throw out the suggestion. It is one that the past student as well as the present Guy's man may consider, and if it is successful in inspiring anyone with the courage to attempt the composition of a hospital song we shall consider that there is something, after all, in throwing out hints in this column.

THE *Southwark and Bermondsey Recorder* contains an interesting account of an interview with an old Passimist and GAZETTE Editor, Mr. Francis Fremantle. Mr. Fremantle is the "prospectively adopted" Parliamentary candidate for Rotherhithe, and the interview, which may be taken as a preliminary election address, sets forth his views on political questions of the day. Some of us may be Conservatives, and some may be outside the pale; but no matter what our political creed may be, as Guy's men all of us will be interested in the candidature of a fellow Guyite, especially when the contest in

which he is to take one of the chief parts is to be fought almost on our doorstep. As a Guy's man we wish Mr. Fremantle every success in his fight, and trust that when he is in Parliament he may devote a thought to the interests of the paper he so ably conducted as a student, and induce the Postmaster-General to abolish the halfpenny tax under which the GAZETTE groans at present. Mr. Fremantle will appreciate the difficulty in dealing with the man who controls the supply of postage stamps!

AN interesting chapter might be written on "What Hospital Officials have to put up with." Every O. P. O. can add his quota to the list of impudent and barefaced demands with which those in the Front and Back Surgeries have at times to deal. Roughly, the offenders fall into two groups, those who err in good faith, and those who, to use Father Fuller's phrase, "err from prejudice." To the former class belongs the individual who submitted patiently to have his temperature taken, and then declared that he merely came to ask whether the "doctor thought paregoric was good stuff to take for a backache," explaining that his missus, and not he himself, suffered from that distressing symptom. Examples of the latter class will readily recur to mind. But it is somewhat difficult to assign a proper place to the gentleman who wrote the following letter to the Dispensary a few weeks ago:—

> DEAR SIR,
>
> Will you very kindly make up the recipe I have marked in the book I am sending along. I know of no safer place to send to. I am prepared to pay a moderate charge. I would employ a Veterinary, only my house is three miles from the nearest, and I cannot afford it. Thanking you in anticipation, I am, sir,

The recipe was for a mixture for "distemper in a dog." Doubtless Mr. Finnemore appreciated the implied compliment in the second sentence, but for all that we believe his correspondent was referred to the three-mile-off Veterinary.

WE have to acknowledge the receipt of the first number of yet another medical publication. This is *The Prescriber*, a monthly devoted "to the pharmacy of the newer remedies," and under the editorship of Mr. Thomas Stephenson, F.C.S., of Edinburgh. As it is somewhat unfair to judge a new periodical by its first issue, we have waited to peruse the second number before introducing it to such readers as may not have received it as yet. The second number is an interesting little issue, necessarily small, for the paper does not pretend to give exhaustive articles. Among the articles in it may be mentioned one on "Some of the Newest Remedies," and a very useful compilation, "Pharmacology in the Medical Journals," containing formulæ and notes extracted from both British and foreign medical papers. There is undoubted scope for such a monthly, and we cordially welcome it. Copies of *The Prescriber*, as, indeed, of all our exchanges, are regularly deposited in the reading room, where they may be inspected, and those who wish to obtain the paper for themselves can do so on communicating with the publishers, 137, George Street, Edinburgh.

IT is with great pleasure that we publish Dr. H. A. Latimer's letter in the present issue. Dr. Latimer, who is an old Guy's man, is soliciting the votes of his colleagues in the profession as a candidate for one of the vacancies on the General Medical Council. Since 1871 he has been established in general practice in Wales, where he has been prominently associated with the work of the British Medical Association. In his election address—which we regret that we are unable to publish in full—Dr. Latimer points out the desirability of choosing a direct representative on the General Medical Council from the ranks of the general practitioners, seeing that the consultant class is already so well represented on that body. He declares himself in favour of the "one portal system of final professional examination," of raising the standard of preliminary examinations, of suppressing quackery, and of "securing to all registered medical practitioners the full rewards due to them for their work." The address has been published in its entirety in the *British*

Medical Journal. It is needless for us to comment on the importance of the forthcoming election, since we are certain that every practitioner is sufficiently enthusiastic to record his vote. Under the circumstances we trust that Dr. Latimer may succeed in obtaining the suffrages of all Guy's men.

To-NIGHT, in the Smoking Room, at 8 o'clock, the Debating Society holds its second meeting, when Mr. R. Evans, assisted by Mr. Allison, will attempt to convince the House that the tendency of modern systems of education towards specialism is deplorable in the extreme. Messrs. Killpack and Bartlett are briefed for the defence of this deplorable tendency. Dr. Spriggs, who, we are glad to see, still manifests an active interest in the Society, will occupy the chair.

THE next meeting of the Pupils' Physical Society will be held on Saturday the 24th inst., in the Wills Library. Mr. H. S. Knight will preside, and the meeting will be devoted to the exhibition and discussion of interesting pathological specimens.

From the Gazette's Special Pathologist.

F. T. M., CHARLBURY.—This sputum contains a fair number of tubercle bacilli.

H. L., MANCHESTER.—This specimen contains a little pus, some squamous cells, and a few micro-organisms. No gonococci have been found in it.

PATHOLOGIST.

Papers by Guy's Men.

A Case of Acute Yellow Atrophy of the Liver. By T. Alpheus Buck, M.D. Lond.—*The Lancet*, 3rd November, 1906.

On Subcutaneous Injections of Adrenalin. By T. R. Elliott and Herbert E. Durham.—*The Journal of Physiology*, October 29th, 1906.

The Spirilla of the Mouth. By Kenneth W. Goadby, M.R.C.S. Eng., L.R.C.P. Lond., D.P.H. Cantab.—*The Lancet*, 10th November, 1906.

Report on an Outbreak of Diarrhœa at the X Depôt Barracks, England, April, 1906. By Lieutenant-Colonel Salvage, R.A.M.C.—*Journal of the Royal Army Medical Corps.*

An Address on Gastrostaxis or Oozing of Blood from the Mucous Membrane of thd Stomach. By W. Hale White M.D. Lond., F.R.C.P. Lond. *The Lancet*, 3rd Nov., 1906.

A Clinical Lecture on Methods of Diagnosis in Skin Disease. By G. Norman Meachen, M.D., B.S., M.R.C.P. Lond.—*The Clinical Journal*, Nov. 14th, 1906.

The Janitor.

There's a person in this place whom you soon will come to know,
And, at any rate, he knows you from the start,
For he keeps a list of names of the men that come and go,
And I do believe he learns it off by heart.
Generations knew him well, and old Guy's men when they meet,
And indulge in retrospective talk, declare,
That when first they came as students shyly up St. Thomas Street,
Mr. Morley, as the Janitor, was there.

You will see him at the lectures, you will spot him in the labs,
For he makes a point to turn up every time:
When you're looking at the hydra, or investigating crabs—
Rather crayfish, but the latter doesn't rhyme—
When you're struggling with a Daniel, and those cursed drums won't go,
Or when chemistry, at first, is all your care,
You will mark him in the doorway, putting dots down in a row,
For the Janitor, you note, is always there.

When you've missed the morning lecture, having slept a little late,
Or forgotten that it was Sir Alfred's day,
Just remembering the fact as you are passing through the gate,
You will find the Janitor is in the way.
And it needs a fund of logic, and no end of declamation,
To convince him that his watch is somewhat fast,
Though by dint of perseverance and some moral persuasion,
You may listen to the lecturer at last.

You may cavil at his presence, you may hold his method 's wrong,
You may liken him to "Martinet" and "bear";
You are young yet, and annoyance does not find you food for song—
You may even judge it justified to swear;
But in time you will admit, as you come to know his way,
And his courtesy and kindliness recall,
That a man who loves his music, and appreciates a play,
Must, though Janitor, be human after all.

Clinical Notes.

A Case of Acute Dilatation of the Stomach, with subsequent History of the Case.

Henry B., æt. 43, stone-breaker. Had been in the army, and had one attack of malaria in Africa twenty years ago; otherwise he had had good health. Had been a fair (?) drinker. No signs of any syphilitic trouble.

On November 20th, 1905, the patient had been working at stone-breaking for four hours without food. At 12.30 he had a "hearty" dinner of pork and parsnips, cabbage and potatoes, and proceeded back to his work. He started working, when he said he felt a bit "queer," and fell down in a faint. He remembered nothing more until I saw him an hour and a half afterwards. I found him lying on his back, semi-conscious, very pale, with his face and body bathed in a profuse cold, clammy sweat; his pupils were semi-dilated, and his eyes glassy in appearance. He was quite pulseless. Respirations shallow and sighing in character, 24 per minute. Temperature 95·6° in the axilla. On examination, chest only moved to respiration; no adventitious sounds to be heard back or front. Heart's impulse was felt in the fifth left space outside the nipple-line for about an inch. It was feeble and fluttering; no thrill could be felt. Precordial dulness was increased upwards to the level of the top of the third rib, and downwards and outwards to two fingers' breadth from the nipple-line; inwards it was limited by the left margin of the sternum. At the apex a soft blowing systolic murmur could be heard, traceable outwards to the axilla. This could not be heard from the angle of the scapula behind. At the base nothing abnormal was to be heard except a slightly accentuated second sound in the aortic area.

Pulse.—None could be felt at radials, and only very feebly at the femorals; here the rate was 118 per minute, and auscultation showed the same rate at apex,

The abdomen was unsymmetrical; the left hypochondrium and lumbar regions were distended; these showed up in marked contrast to the right, which were flat. The distended portion of the abdomen had a somewhat definite shape, with a curved lower margin extending from the umbilicus round up to the left hypochondrium. This swelling seemed to move up and down if patient took a deep breath. On palpation of the swelling, gurglings were felt and slight peristaltic movements were produced. A loud splashing sound was obtained on shaking the patient. Percussion of the swelling elicited a high tympanitic note over the upper part and a semi-dull note over the lower. Upwards, a high tympanitic note was obtained as far as the fifth rib, and outwards and downwards to the left hypochondrium.

Urine (catheter specimen) was dark sherry coloured, acid, and had a specific gravity of 1020. No albumen.

An injection of Liq. Strych. was given, and when patient had improved somewhat, an emetic of warm water and mustard was given; this produced profuse vomiting. The vomited matter consisted entirely of the undigested food he had taken, and almost filled a good-sized washing basin. Vomiting continued at intervals for the next four days, and consisted of a dark greenish fluid, not very offensive in smell, and generally a pint and a half to two pints was vomited each time. After the emetic the patient gradually recovered, a mixture of Acidi Carbolici and Strychnine being given, and he was well enough to resume work in six weeks. He afterwards had no digestive troubles.

Subsequent history.—On June 18th, 1906, patient had been drinking, but was not intoxicated, and whilst stepping off a rather high pavement, fell down and was found to be dead, with blood flowing from the mouth and nostrils.

Autopsy fourteen hours after death. Rigor mortis well marked. Post-mortem staining very extensive. Nostrils and mouth filled with clotted blood.

On opening the thorax, the lungs were found to be very dark red in colour, and only partially collapsed. The right lung was bound by some slight old adhesions behind to the chest wall, and the thoracic cavity contained about a pint of semi-fluid blood each side. The heart and lungs were removed together. On close examination of the former, a very thin-walled aneurysm of the arch of the aorta, the size of a large orange, was found, and this had an irregular opening about the size of a clay pipe stem communicating with the right bronchus. Both bronchi were filled with blood, and also the smaller ones. The right lung, whon separated, sank in water, but the left just floated. The stomach appeared normal in size, and no signs of any old trouble could be found at the pylorus or elsewhere. The liver was slightly enlarged, but otherwise healthy. Kidneys normal. Brain normal.

The above case seems worth reporting, owing to the rarity of acute dilatation of the stomach and the subsequent history of the case.

Wotton-under-Edge. E. F. CLOWES.

Pass List.

FINAL CONJOINT EXAMINATION, OCTOBER, 1906.—MEDICINE, SURGERY AND MIDWIFERY.—*A. W. Berry, *C. A. L. Mayer, *W. H. Trethowan. MEDICINE AND SURGERY.—*J. S. Farnfield, *I. Valerio. MEDICINE AND MIDWIFERY.—*I. R. Cook, R. J. Reynolds. SURGERY AND MIDWIFERY.—J. T. Smalley, St. J. A. M. Tolhurst. MEDICINE ONLY.—C. E. M. Jones, *H. V. Mitchell, *G. R. Phillips, S. McK. Saunders. SURGERY ONLY.—*E. H. Adams, *E. Alban, *L. Doudney, *P. D. F. Magowan, *E. Morgan, *T. Norman, *R. M. Rendall, *A. T. Rivers, *H. E. H. Tracy, *A. Zorab. MIDWIFERY ONLY.—A. T. Densham, W. C. M. Dickey, T. R. Harvey, E. P. Minett, H. H. Moyle, W. P. H. Munden, E. L. R. Norton, C. B. Ticehurst, R. R. Walker.

* Denotes completion of examination.

Aspects of German Medicine

(Continued).

By Arthur F. Hertz, M.A., M.B., M.R.C.P.,
Radcliffe Travelling Fellow.

III.—Clinical Methods.

Broadly speaking, the ordinary physical examination of patients in Germany is less thorough and accurate than in England, whilst the examination of their blood, their urine and fæces, and their stomach contents is more scientifically and comprehensively carried out.

Percussion is often done with the aid of a hammer or pleximeter or both, the hammer being also used for obtaining knee-jerks and other tendon phenomena. The professor of one well-known clinic, whilst still a young man, lost his percussing finger in a shooting accident. Instead of learning to use another finger for percussion, he employed a hammer, and encouraged his students to follow his example, so the result of the accident has been that several hundred practitioners have been deprived of the invaluable aid of the muscular sense in percussion.

The binaural stethoscope is almost unknown in Germany, various forms of the wooden instrument being employed, in spite of its many disadvantages. Direct auscultation with the ear on the skin is also much used, even with dirty out-patients, especially in examining the back. Both auscultation and percussion are generally done with less care and completeness than is usual here, and it is astonishing to observe with what assurance a patient is told that his lungs are healthy after an examination with the stethoscope placed in perhaps four places on each side in the front of his chest and the ear in two places on each side behind.

In many clinics a complete blood examination, including a differential count of leucocytes, is done on every new case, and in many instances it is repeated two or three times a week. No doubt this is often surperfluous, but it sometimes is of unexpected service, as in a case of coma I saw, in which the presence of typical granulated red blood-corpuscles suggested that lead poisoning was the cause—a suggestion which was subsequently confirmed when the patient recovered sufficiently to be able to give his history.

Bacteriological examinations of the blood are very frequently made. They are never omitted in cases of suspected typhoid fever, as in almost all cases the B. typhosus is found in the blood in the first week of the disease, when Widal's reaction is still negative.

In most nerve clinics a lumbar puncture is made in all cases. By examining the cerebro-spinal fluid very early, cases of tabes are sometimes recognised at a period when the symptoms and signs are too slight to give a definite diagnosis and treatment by mercurial injections has yet a chance of doing some good. Lumbar punctures are little used in treatment, except in cerebro-spinal meningitis, which, in all the cases I saw, showed immediate improvement after each tapping, and in some cases a cure ultimately resulted, probably largely owing to this method of treatment.

The systolic and diastolic blood-pressures are estimated in every patient in Munich and some other clinics. The extensive data thus obtained have given many interesting results. Most of these are, no doubt, well known in England, but I may mention the normal blood-pressure found in most cases of heart failure and the fall which frequently accompanies the improvement brought about by digitalis*, the low blood-pressure, which is sometimes of diagnostic value, found constantly in tuberculous patients, the high blood-pressure in cases of lead poisoning, even in the absence of vascular or renal changes, and the curious fact that in granular kidney due to gout the blood-pressure is not raised.

Of all English physicians the best known and most frequently quoted in Germany is probably Dr. Mackenzie of Burnley, a prophet who has hardly met in his own country with the recognition he deserves. The methods of studying disorders of the circulation introduced by him are much employed, and many important investigations confirming and extending his results have been published.

A remarkable amount of work is done in the chemical side of clinical work. Complete metabolism researches are constantly carried out. In the laboratory of Professor Müller's clinic in Munich, where I worked for seven months, it was not at all unusual for a dozen Kjeldahl nitrogen determinations to be made in a day. In some clinics not only is the sugar in the urine of diabetics estimated daily but also the ammonia, acetone and β-oxybutyric acid.

Perhaps some of the time spent in laborious metabolism researches is wasted, but it should

* In an excellent paper in the *Lancet* of September 29th, 1906, Dr. H. J. Starling comes to a similar conclusion: "However bad the patient, however ineffective the work of the heart pump, in no case of heart disease, ordinarily so called, have I ever found an arterial pressure below normal."

be remembered that most of what is known of the pathology of disorders of metabolism comes from the German clinics. In diabetes at any rate this work has also a practical value, as such accurate investigations allow the effects of changes in diet to be most accurately studied, and have resulted in the discovery of a number of new dietetic measures which have yielded remarkably good results.

A method of examining urine and blood which is in constant use in most German clinics, though hardly known in England, is cryoscopy —the determination of the freezing point. Theoretically this should yield most valuable results, as it gives a measure of the number of molecules present in a solution. Thus cryoscopy of the urine in Bright's disease was at first expected to show to what extent the functional capacity of the kidneys was impaired. The results have, however, been somewhat disappointing, owing mainly to the difficulty of keeping the diet sufficiently constant for comparable results to be obtained. But in certain conditions the value of freezing-point determinations is considerable. An abnormally low freezing of the blood in kidney disease shows that retention of waste products is occurring; this is of great practical importance when it is desired to remove one of the kidneys and it is uncertain how far the other kidney is capable of doing the work of two. The normal freezing-point of the blood is 0·56°; when the freezing-point in a case of kidney disease is 0·59° it is dangerous to do a nephrectomy, and when it is 0·60° the operation is unjustifiable, as it is quite certain that the second kidney is too much diseased. In pyelitis and cystitis the freezing-point of the blood (δ) and urine (Δ) are of course normal.* An increase in δ, or a diminution in Δ, suggests that the kidneys have become infected.

In those not infrequent cases of failing heart with albuminuria, in which it is doubtful whether the renal or the cardiac condition is primary, if Δ is abnormally small or δ is abnormally great, the evidence is strong that the kidney disease is of most importance, as the congested kidneys of heart failure are able to perform most of their functions quite efficiently.

Erich Meyer of Munich has recently thrown much light on the pathology of diabetes insipidus by cryoscopic researches. In true diabetes insipidus the kidneys are unable to excrete concentrated urine, so that Δ remains constantly abnormally small. Hence in order to excrete what is necessary a large amount of urine must be produced. If a normal man eats an extra 10 grms. of salt, he passes no more urine, but the percentage of salt in the urine and Δ increase. A patient with diabetes insipidus, on the other hand, reacts with an increased excretion of urine, the freezing-point of which remains unaltered. Hence efforts to treat the disease by limiting the supply of water result in retention of substances which should be excreted, thus accounting for the well-known fact that discomfort or even serious symptoms may result from this procedure. The only logical treatment is to give a diet which is poor in proteid and contains as little salt as possible, so that the work done by the kidneys is reduced to a minimum. Thus true diabetes insipidus is a functional disease of the kidneys, though undoubtedly in many cases it depends on some abnormal cerebral condition. It must be distinguished from the rare cases of pseudo-diabetes insipidus, or polydypsia, in which abnormal thirst is the cause of the polyuria, and restriction of fluid rather than a special diet is the suitable treatment. In such cases the reaction of the kidneys to an extra 10 grms. of salt is the same as in normal individuals.

The examination of the functions of the stomach by test meals is generally carried out in Germany in a very elaborate manner. It would seem also that German patients are much less unwilling than English patients to have stomach tubes passed. As a consequence of this the less severe gastric disorders, especially those which are functional in nature, are more accurately studied than with us, and conditions of diminished, absent or increased flow of gastric juice are more often recognised. Thus functional achylia gastrica—in which the gastric juice is permanently absent from some unknown congenital cause—appears to be by no means very rare, though its recognition is unusual owing to the remarkable fact that it sometimes gives rise to no symptoms at all, frequently to intestinal symptoms alone, and only rarely to any gastric disturbance more serious than recurrent attacks of slight dyspepsia.

On the other hand, in spite of an examination which sometimes requires several hours to complete it, I am convinced that the most serious of all gastric diseases—cancer—is recognised no earlier in Germany than in England. There has not been a single successful excision of a gastric growth in Munich.

* δ is the number representing the freezing-point of the blood and Δ the same for the urine. If δ is said to be *increased* it is meant that the freezing-point of the blood has *fallen*.

It is also probable that the frequent elaborate examinations of the stomach functions in patients suffering from mild functional dyspepsias tends to direct their attention too much to the working of their internal organs, and to convert a dyspeptic into a hypochondriac. In many cases the investigation of such cases is prompted by scientific curiosity rather than by desire to benefit the patient.

Intestinal diseases are frequently examined in Germany in a similar way to gastric cases by means of special test meals, the best of which have been devised by Adolph Schmidt. The investigation of the fæces passed after such meals is often of service in determining the exact nature of the abnormal condition. Great stress is also laid on the tests for blood in the fæces. It is found that in a large proportion of cases of gastric ulcer and carcinoma traces of blood are passed in the fæces almost continuously; these can only be discovered by special chemical tests. If care is taken to exclude the presence of blood in the food—as in insufficiently cooked meat—the proof of the presence of blood, in however small amount, is valuable evidence in favour of an organic rather than a functional disease of the stomach or intestines.

Röntgen rays are used very extensively in Germany as an aid in the diagnosis of thoracic and abdominal diseases. We have so much to learn in this respect from Germany that I have made it the subject of a special paper which will shortly appear elsewhere.

(To be concluded.)

Guy's Physiological Society.

A MEETING of the Society took place on November 5th. An interesting paper was read by Mr. A. Neville-Cox on the "Physiology of Sleep." The conditions of environment conducive to sleep were described, and an account was given of the various bodily changes that occur, mainly with regard to respiration, circulation, and reflex actions. The scanty experimental evidence on the subject was reviewed, and finally some of the numerous theories of sleep were examined and classed in four divisions:—(*a*) Vascular, (*b*) Chemical, (*c*) Organic, (*d*) Histological. No satisfactory conclusion could be arrived at, as up to the present time our knowledge on the subject is limited and very imperfect.

A long and interesting discussion then took place. Dr. Hertz strongly supported the dendrite theory of Demoor. Dr. Pembrey thought none of the theories mentioned could give a satisfactory explanation. He regarded sleep as being only one part of a continuous cycle, the various physiological and histological changes occurring being subsidiary to the whole process, and pointed out that it must first be determined what becomes of consciousness during sleep. Many other members took part in the discussion, and the meeting closed with a vote of thanks to Dr. Pembrey for occupying the chair.

W. L HIBBERT,
(Hon. Sec. & Treas.)

Obituary.

William Horrocks,
M.R.C.S., L.S.A.

We regret to announce the death of the above-named gentleman, which took place on the 4th November. He was born in 1839, and commenced his medical career as an assistant to Dr. Clarke, of Farnworth, near Bolton. He served an apprenticeship, and entered Guy's in 1858. After obtaining a double qualification, he commenced practice in his native village, Turton, near Bolton, Lancashire, in 1862. The population was sparse and scattered over many miles of rough roads. Hence he was obliged to ride on horseback to visit his patients. He was fond of a country life, and a great lover of animals. He used to speak with great enthusiasm about Guy's and its staff. Particularly he had a great admiration for Cock, Hilton, Gull and Wilks, whom he considered to be the best teachers in his time. What they and the others taught him he practised for forty years, and he considered that his results had been very good. Most of his patients being poor, and the distance to send for efficient help being great, he was obliged to rely on his own resources, and hence he became quite expert in overcoming all kinds of obstetric difficulties, and his reputation as an accoucheur extended beyond his own wide district, and not infrequently he was called in by other practitioners to help in difficult cases.

He took an active part in educational and sanitary matters. He was chairman of the School Board in his district during the whole of its existence. He retired from practice in 1902. He enjoyed good health all his life. At the end of September he began to have jaundice. He was attended by Dr. Alderson, who succeeded him in practice, and by Dr. Mothersole (of Guy's), from Bolton. Mr. George Arthur Wright (of Guy's), Professor of Surgery at Owens College, visited him, and recommended his removal to a nursing home in Manchester, with the idea of performing cholecystotomy. Soon after his removal, bronchitis set in severely, and the operation was postponed. He was attended by Professor Dixon Mann, of Manchester, and everything possible was done, but hypostatic pneumonia supervened, and he succumbed on Sunday, November 4th. He leaves a widow and three daughters.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

General Medical Council Election.

SIR,—It is probably known to the readers of your paper that, at the end of this month, an election of three Direct Representatives of the Registered Medical Practitioners of England and Wales to sit in the General Medical Council, takes place. I am a candidate for one of these seats, and am acting in concert with Dr. L. S. McManus, of Wandsworth, in that capacity. May I venture to appeal through your columns to old Guy's men for their interest and support at this election? In coming forward on this occasion Dr. McManus and I have but one object, viz., that of furthering the interests of our professional brethren. I enclose a copy of my address, which has already appeared in the *British Medical Journal* and the *Lancet*, and thanking you in anticipation for the insertion of this letter,—I am, Sir, yours faithfully,

H. A. LATIMER.

202, St. Helen's Road, Swansea,
November 6th, 1906.

The Cobham Cat.

DEAR SIR,—So many mummified cats have been discussed in your columns lately that I feel emboldened to write you a short account of one that I have in my possession, which was given to me by Mr. G. Bellingham Smith. Some years ago this gentleman was stopping at a small village on a fishing stream in Scotland. He was strolling one day by the banks of this stream when he observed a cat sitting rigidly still on the rocks. The air there is singularly pure and fresh. He was struck by the cat's immobility and by its staring eyes. He followed the gaze of those eyes, and discerned in the near distance Mr. Hicks trying to land a large salmon, and with him Sir Cooper Perry, who was energetically using as a gaff a motor-car starting handle. The cat had been watching them so long in their attempts that it had become mummified!

The cat was a female. Mr. Smith lifted her up, and carrying her somewhat carelessly by her shrivelled tail, the appendage unfortunately broke off short. Some months later he gave her to me.

In the interests of science I have subjected the female cat—hereinafter referred to as the Suffragette—to what I held to be appropriate treatment. Under applications by Mr. Shenton of radium bromide, her tail has now grown again. By means of high frequency currents new life has been instilled into her emaciated frame. Further, I have met in consultation my colleague, Mr. Fagge; he grafted some of the upper branches of the facial nerve into the sixth (in a cat) sacral, with the result that whenever she blinks her eyes she wags her tail. And Mr. Lane has removed her colon.

The Suffragette is now regarded by all the family as a much-respected and looked-up-to dependent.

With all the other cats I have read of in your columns I have noticed a certain amount of mystery—a sort of skeleton-in-the-cupboard atmosphere; with the Suffragette, I venture to think, no such sully on her fair name exists; her history is fully substantiated by names, places, and—well, not dates.—I am, Mr. Editor, yours, etc.,

PHYSICIAN.

A Midwife's Note.

DEAR MR. EDITOR,—I enclose a note that may be of use to you. The Dear in pesenter=adherent placenta. The latter tale is a true one.

Facsimile of a letter received from a midwife:—

Dr. P.
Oblige me Mrs. ———
Dear in pesenter baby has been born
40 Mintues.

A colleague of mine was attending a sick midwife. As he passed through the kitchen he saw her little Tommy blowing bubbles through the catheter!

Yours truly,

VAUGHAN PENDRED.

2, Lansdowne Place, Coventry.
November 8th, 1906.

Appointments.

Civil.

STEVENSON, C. M., M.B., B.C. Cantab., M.R.C.S., L.R.C.P., has been appointed Assistant Medical Officer at the Hollymoor Asylum.

TAYLOR, J. GEORGE, M.A., M.D. Cantab., M.R.C.P. Lond., has been appointed Honorary Physician to the Chester General Infirmary.

S. E. DENYER, C.M.G., M.D., has been appointed an Examiner in Anatomy, and M. S. PEMBREY, M.D., and F. G. HOPKINS, M.A., Examiners in Physiology at the University of Cambridge.

Naval and Military.

Surgeon CYRIL SHEPHERD, R.N., is promoted to be Staff Surgeon.

Fleet Surgeon W. W. PRYN, R.N., has been appointed to the *President*, additional, for temporary service at the Admiralty, and Surgeon F. G. GOBLE, R.N., to the *Albemarle*.

Major E. CHRISTIAN HARE, Indian Medical Service, is promoted to be Lieutenant-Colonel.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Payment is a matter of arrangement, and the fees that the GAZETTE *can offer are merely nominal, but if the writer desires any remuneration that fact should be stated.*

A Case of Haematemesis.

CLINICAL LECTURE BY DR. HALE WHITE.

GENTLEMEN, — Many of you have seen the woman about whom I propose to speak this afternoon. Her age is 25, and she is now in Mary ward. She is a domestic servant, and she was sent into the hospital by Dr. G. Levick, who was house-physician here. She came in because she had sickness after meals and pains in the stomach. Her work is not very hard, and she has always had good food. We noticed that she looked healthy. She gave us this history, which was confirmed by what Dr. Levick wrote. Two years ago she had indigestion very severely, and great pain in the stomach almost immediately after taking a meal. At this time she had very bad teeth, many decayed stumps, and she drank a good deal of tea. Dr. Levick had the teeth put right, and the indigestion was found not to be due to them. She gave up her excessive tea drinking. In October, 1904, she was unable to keep down any food, being sick after every meal. On November 3rd she took to her bed, and was attended by Dr. Levick, who fed her upon rectal injections. In January, 1905, she was better and returned to work for three days, after which, however, she was ill again. This time she was in bed six weeks, and again had some rectal feeding. After this she was fairly well until July, 1905, when again she had a month in bed. In September and November she was sick, but did not have to go to bed. Between last November and the present time she has had the trouble on and off for a few days at a time. Ten days before admission she was obliged to lie up, and she has been in bed ever since. The sickness usually comes on half an hour after meals, and she has a burning pain in the stomach. She has brought up blood when vomiting on five occasions. So we may summarise by saying, here is a young woman, æt. 25, who for years has had pain in the stomach, sickness, hæmatemesis, yet she looks healthy. The day after admission she was sick after taking peptonised milk. We gave her a couple of drachms of subcarbonate of bismuth suspended in milk, and she was skiagraphed. We could see that the bismuth lay one and a half inches above the umbilicus, so that the stomach was not dilated. Her blood has been examined, and she was found to have 93 per cent. of hæmoglobin, 8,000 leucocytes, and 5,800,000 reds. Many of you will remember that she was operated upon, and at the bed side we discussed why that should be done. Now I had better tell you why we did it.

The most important symptom was hæmatemesis; as you know, there are a great many causes for this. Lately we have been very interested in hæmatemesis in young women. The textbooks tell you that it happens as a result of heart disease, of cirrhosis of the liver, that it may occur in pernicious anæmia, in chronic Bright's disease, and so forth. But it is surprising how, at the bedside, you can rapidly narrow down the causes. You can easily see whether the patient has heart disease, you can generally tell whether she has cancer of the stomach, or cirrhosis of the liver; and often you can quickly narrow the problem down to this: Has this young woman, who is bringing up quantities of blood, got a gastric ulcer, or is the blood simply oozing from the gastric mucous membrane? That is a problem which is frequently being presented to us, and has been presented to our predecessors. For example, listen to what Sir George Burrows says in 1840, in Tweedie's Library of Medicine. In vol. v. he says, "Hæmatemesis, independent of any apparent change of structure in the mucous membrane of the stomach, or any organ capable of influencing the circulation through that mucous membrane, is certainly rare, although the author believes he has met with several such cases." So you see he met with cases in which the blood transuded from the mucous membrane of the stomach without there being an ulcer. He goes on to say that he supposes it is often due to vicarious menstruation, and that this may continue for months or years, and is hardly ever dangerous.

But it gradually became clear that these cases were not examples of vicarious menstruation. Unfortunately, instead of thereupon saying that they did not know why these young women brought up blood, doctors jumped to the conclusion that they all had an ulcer of the stomach. And it was, for a long time, taught that every young woman who brought up blood without extraneous cause as heart disease or cirrhosis, had an ulcer of her stomach Before this patient was operated upon, inasmuch as we were familiar with the fact that the common notion that there was ulcer in every case was wrong, we said we should not be surprised not to find an ulcer, and that it might be that the blood oozed from the mucous membrane of the stomach. An operation was nevertheless done, because the symptoms observed by a trained observer for a long while were consistent with the presence of an ulcer. If I were lecturing on ulcer of the stomach, I should point out to you that the only hope of

helping such a patient as this, who had been suffering for years from hæmatemesis and sickness, would be to have a gastro-jejunostomy done, if her symptoms were due to a gastric ulcer. At the operation, exploration revealed no ulcer; so that she is an example of oozing of blood from the gastric mucous membrane. You will find numbers of such in the older literature.

I have often talked of these cases with my friends, and I asked Sir Cooper Perry one day to suggest a name for this condition, in which blood oozes from the mucous membrane of the stomach without an ulcer being present. He suggested that a good term to apply was gastrostaxis, a word which falls into line with epistaxis —an oozing of blood from the mucous membrane of the nose, in many cases at least. Gastrostaxis is, I think, a short and convenient word for the condition.

There is no doubt whatever about one fact; that hæmatemesis is much commoner in young women than it is in men. For example, of thirty-six consecutive cases of hæmatemesis at Guy's, under thirty-seven years of age, twenty-seven were women and nine men. And every collection of statistics shows about the same proportion. So please remember that fact. If all the cases of hæmatemesis in young women were due to ulcer, it follows that ulcer is much commoner in women of from twenty to thirty than it is in men from twenty to thirty. But our post-mortem experience shows that ulcer is rather commoner in men over thirty than under thirty. So if we are to accept all cases of hæmatemesis in young women as cases of ulcer of the stomach, it follows that ulcer of the stomach is not only commoner in young women, but is seen at an earlier age in them than it is in men. Another point bearing on the argument is this: Many authors publish collections of cases showing that ulcer of the stomach is rather more fatal in men than in women; others think it is more fatal in women than in men, but there is not much difference one way or the other. So we may assume that even if ulcer of the stomach is a cause of death oftener in women than in men, it is not very much oftener a cause of death in women than in men. But we have seen that a large number more young women than young men bring up blood; so that if all the young women who bring up a large amount of blood are suffering from ulcer of the stomach, it follows that the mortality from ulcer of the stomach among women is much less than the mortality of ulcer of the stomach among men. Now, for these reasons, namely, that if these people who bring up blood all have ulcer, the mortality among young women will be less than among men, and the incidence of the ulcer would be later in men than in women. I have taught at the bedside for many years that one of two things must follow: either ulcer of the stomach has a much better outlook in women than in men, and occurs earlier in life, or a great many young women who were said to have ulcer of the stomach had not got it at all. And I do not see any reason to suppose that ulcer of the stomach should be more fatal in men than in women, or occur at a different age, so I have been accustomed to teach that many of the young women had not got ulcer at all. But for a long while I never gave a lecture on the subject, because I could not prove my point to you. But now that surgeons have taken to opening the stomach for hæmorrhage I have been able to collect together twenty-nine cases in which, either post-mortem or at operation, in a patient who brought up a quantity of blood and was therefore supposed to have ulcer of the stomach, no ulcer was present. Let me give you one: I have got them all copied out in these notes; it is one which occurred in this hospital. Only two out of the twenty-seven occurred in males, and this is one of them:—

A male, æt. 18, was admitted into Guy's Hospital, under Dr. Fawcett, for hæmatemesis on January 31st last year. Nothing of importance in the previous history. On January 30th he vomited two and a half pints of blood, and had melæna after admission. Was put to bed and ordered milk diet. On February 4th he vomited one and a half pints of blood, after which he was much blanched. On February 9th more blood was vomited. After consultation with Sir Alfred Fripp, the stomach was opened on February 11th, but nothing wrong was seen in it or in the duodenum; no ulcer was seen anywhere, and the mucous membrane appeared quite normal, except over a small patch on the posterior wall. Here there was oozing of blood from minute points, and the slightest touch produced further hæmorrhage anywhere in this area, which, apart from the oozing, appeared normal. Gastro-jejunostomy was done, and the patient, six days after the operation, vomited more blood, and died the same afternoon.

Here is another Guy's case, interesting as being older than most of them. A woman, æt. 44, was admitted under Mr. Charters Symonds, who has recorded the case in the Transactions of the Medical Society, Vol. 26. She had had indigestion twenty-five years. On

November 13th she was walking in the street when she suddenly felt faint, and immediately vomited a quantity of red blood, and passed red blood from the rectum. She soon vomited more blood. As the hæmatemesis continued, the stomach was opened on November 24th, but nothing abnormal was found. A posterior gastro-jejunostomy was done, and three very small bleeding points in the duodenum were cauterised. She ultimately died, and at the post-mortem the stomach and duodenum appeared perfectly healthy.

I have here the records of twenty-nine cases of people who had severe gastric hæmorrhage, but in whom inspection of the stomach during life or post-mortem showed that no ulcer was present. These are, I think, cases to which the term gastrostaxis can be applied. One, which I have described to you, is at present in Mary ward.

Now you, of course, want to know something about the symptoms of this condition. The patients suffer from repeated hæmatemesis, which, as we have seen, may go on for years. It is frequently very profuse, as shown by the fact that many of my twenty-nine were operated upon for hæmatemesis only. They are very pale, from the loss of blood; it is vomited very quickly, because it is usually described as being bright red. Here is a case which admirably shows how repeated the attacks may be. There were intervals of months, or even a year, between attacks. Case 10: A woman, æt. 25, had her first attack in August, 1900; the second, February, 1901; the third, January, 1903; the fourth, July, 1904. In many of the twenty-seven cases the attacks occurred on and off for many years. Case 7, seven years; case 12, eleven years; case 18, many years; case 21, four years. But there is this important fact: it is quite certain that in nearly all the cases the attacks ultimately ceased, because very few died, and yet the disease is very rare after forty, so that the natural tendency of the disease is to get well. There may be melæna, as I have shown, and in one case blood oozed from the duodenum. I have pointed out to you that these patients are frequently sick, and this may be quite unrelated to feeding. They may vomit food as well as blood. They suffer very much from indigestion, and that was true of the patient now in Mary ward. She also had great pain in the stomach, and they all have that, or most of them, and because of this and the bleeding they are thought to have gastric ulcer. Please remember that they generally are not wasted; our patient upstairs certainly is not. It would be exceptional to find a woman who had gastric ulcer for several years, and causing such severe symptoms, not to be wasted. Again, remember that our patient looked well, and had a good colour; she has now, although these severe symptoms have lasted for years. And her blood was particularly healthy blood—over 90 per cent. of hæmoglobin, and over 5,000,000 red cells

Let us now discuss the ætiology of the condition. It has been suggested that these are really cases of ulceration which has so completely healed that by the time the post-mortem is made, no sign of it is present. That does not bear listening to for a moment, for in some of my cases which have died without an operation, death has taken place very shortly after profuse hæmatemesis, and no ulceration has been seen then nor in any of these many cases which have been operated upon.

Then the suggestion has been made that these are cases of ulcer after all, but that the ulcer is just beginning. That will not do, either. Our present patient has had the disease three or four years; some of those I have notes of have had hæmatemesis seven years; one had had it eleven years. Again, surgeons have described that when they opened a stomach, they found blood oozing from many points. You may have two, or even three, gastric ulcers present in the same stomach, but not several.

The older authors thought there was some association between this condition and chlorosis. In the first volume of Guy's Hospital Reports you will find a paper by Dr. Ashwell, who was then obstetric physician here. In that paper he incidentally mentions these cases, and suggests that they have something to do with chlorosis. That suggestion, I think, arose because often after the hæmorrhage the patients were blanched, and many authors besides Dr. Ashwell mention it. But I do not think gastrostaxis has anything to do with chlorosis, for these reasons. Out of my twenty-nine cases, two were men, and one of that series was a woman who many of you saw in Clinical last year. We were in some doubt about her age, but she was certainly over fifty. And it is hardly likely that a woman over fifty years of age should have chlorosis. And this patient in Mary was expressly stated to have looked well on admission. Mr. Cameron looked at the blood of a case which we believed to be an example of this condition. It certainly was not chlorotic; and Mr. Laidlaw only recently examined the blood of the patient now in the ward, the interior of whose stomach we have inspected. It certainly is not chlorotic.

Further, it is often stated of a patient with gastrostaxis that she was perfectly well at the time of her first hæmorrhage. And I do not think that patients with chlorosis are especially liable to bleed. Indeed, you remember that they have amenorrhœa, as a rule. So I think you will agree that we cannot associate these oozings of blood from the mucous membrane of the stomach with chlorosis.

Then it has been suggested that these patients are neurotic, a common suggestion with many when they cannot suggest anything better; but I think you will agree that our patient upstairs is not neurotic, and my observation is that these cases are not especially neurotic.

It has also been suggested that they really belong to the same group as gastric ulcer, and that they have minute erosions from which the hæmorrhage springs. We partly dealt with that suggestion when I mentioned that they could not be early ulcer; but the idea has been put forward so much that it is worth dealing more in detail with it. First, you have to remember that there must be an erosion for bleeding to take place; bleeding cannot occur unless the epithelial lining of the stomach is torn. That these cases of gastrostaxis are due to erosions of sufficient importance to bleed like genuine gastric ulcers I do not think can be, for the following reasons: We have mentioned that gastrostaxis may last ten or twelve years, yet no ulceration is found when the stomach is opened. The oozing is multiple, but ulcers of the stomach are not. Then, the proportion of women who suffer from this gastrostaxis is very high indeed, as compared with men; there are only two men in our twenty-seven cases But in the post-mortem records you find that the number of men and women who suffered from genuine ulcer of the stomach is nearly equal. These facts seem to me to dispose of the notion that these cases are associated with ulcer. Then if this were a common way in which ulceration began, you would expect hæmatemesis to be the first sign of ulcer of the stomach, and it would be an acknowledged fact that that was so in a large proportion of the cases. But it is common knowledge that hæmatemesis is frequently not an early sign of ulcer of the stomach.

I wanted to find out more about gastric erosions and ecchymoses, so I looked through the post-mortem records here. It has been said by some authors that gastric erosions occur in about two per cent. of all post-mortem examinations. I went through the last 2,246 post-mortems we have had here. In sixteen cases the demonstrator who made the autopsy found erosions in the stomach. In six of the sixteen cases they might have been due to the backward pressure from disease of the heart. In six there was serious disease of the abdomen. Of the remaining four cases, two died of lobar pneumonia, one from general atheroma, and one from general tubercle. You see that the diseases associated with gastric erosions are certainly not the diseases associated with gastric ulcer, or with gastrostaxis. In fourteen of the cases of gastric erosion the ages were stated, and they were 69, 67, 63, 60, 54, 50, 49, 47, 45, 44, 38, 36, 30, 16; giving, you see, a much higher age than is commonly met with in gastric ulcer, and a much higher age than is met with in gastric oozing, for we have seen that this occurs particularly in young women. Therefore the experience of the post-mortem room does not support the view that gastric erosions have any relationship to gastric ulcer or to gastrostaxis. So I am afraid we must leave the explanation of gastrostaxis undiscovered. And you will not be surprised that we have to do so, because none of us know why the blood should ooze from the mucous membrane of the uterus every month in a healthy woman. Until we know more about that, I do not imagine we shall know why oozing of blood occurs from the stomach.

Let us now turn to the frequency of these cases. You remember that the figures giving the relative proportion of females to males with genuine gastric ulcer as seen post-mortem, showed that these occurred with about equal frequency in the two sexes. But out of my twenty-nine cases of gastrostaxis, you remember we only had two males, so we must come to the conclusion that many of the young women who come into hospital suffering from hæmatemesis have got gastrostaxis, and not gastric ulcer; and thus we learn that gastrostaxis is a fairly common condition. I could pick out several modern text-books which tell you that hæmatemesis in young women is almost a proof that they have ulcer of the stomach. I think I have shown you this afternoon that this is an error.

Next, what is the outlook for these people? I went through seven thousand five hundred of our post-mortems here, and found that there have only been four fatal cases of oozing of blood from the inner surface of the stomach. So you see it is not a condition which has a very serious outlook, for the number of women suffering from it is large. Further, two of those four cases were operated upon, and I will show you in a minute that we

have learned since these cases were operated upon that this is undesirable. Then I have already pointed out to you that the condition tends to get well, because while it is very common in young women of between twenty and thirty years of age, it is very rare in women over forty or fifty, and certainly the younger women do not die from it. This favourable prognosis is confirmed by the authors who wrote many years ago, because they pointed out that what they called vicarious menstruation got well.

How are you to diagnose this condition? That, I admit, is difficult. In many cases of hæmatemesis the diagnosis is easy; you can tell whether the patient has heart disease, cirrhosis of the liver, or cancer, as the case may be; but the diagnosis between ulcer and gastrostaxis is difficult. There are, however, a few points to which we may direct our attention. There must be an ulcer of the stomach if there are present mechanical effects from the ulcer, such as adhesions, or dilatation of the stomach, or if the patient has an hour-glass stomach. Then in ulcer of the stomach the amount of hydrochloric acid secreted is, as a rule, increased, so it may be that if there is a considerable percentage of free hydrochloric acid in the stomach, this is evidence that the case is one of ulcer and not of gastrostaxis. The latter occurs chiefly in women, so you will be very cautious about diagnosing it in a man. Then the sufferer from a gastric ulcer of long standing is usually thin, but many cases of gastrostaxis look well. Again, if there are considerable intervals without gastric symptoms, this is in favour of the case being one of oozing, rather than one of gastric ulcer.

Next, what are you going to do for these women who suffer from gastrostaxis? The first thing to discuss is, Are you going to operate or not? Now, I only found four people with this condition who bled to death out of 7,500 post-mortems, though it is so common for young women to bring up blood. During the time we had those 7,500 post-mortems, 32,000 medical cases were admitted, so that the number of those who die from gastric oozing of blood is very small indeed. I have already shown that liability to gastrostaxis passes away as the patient grows older. It must also be obvious to you that it is very difficult indeed to stop the oozing by operation; the blood oozes from many points in the stomach.

I have notes of several cases showing that bleeding recurred after attempts to stop it by operation, for example, No. 26 in my series: Stomach and duodenum were explored for ulcer, and none was found; a note made some months later says, "This patient is not any better, she still continues to have hæmatemesis and melæna." The operation did not cure the bleeding, you see. Then take case No. 10 in my series, recorded by Dr. Bertram Dawson. He says, "Many fresh hæmorrhages after operation; patient's condition not improved. A second operation was performed for another attack of hæmatemesis, nevertheless, the attacks were continued to the present time." Cases 16 and 17 were recorded by Dr. Herringham, and in both, hæmatemesis recurred after operation. So it did in case 27, and probably in others. Next remember that operation is often fatal in these cases. Out of my twenty-nine cases, twenty-four were operated upon, and death occurred in 27 per cent. of them. Indeed, if you read the literature of the subject, you will find that surgeons now strongly deprecate operation upon these patients. If left alone, they very rarely die. Therefore for all these reasons we learn that you should never operate during the hæmorrhage with a view of stopping it, and there can be no object in operating between the attacks of bleeding. In gastric ulcer, however, operation between the attacks may be the right thing to do. In our case we deliberately operated between the attacks, because there was the possibility that the patient had a gastric ulcer.

With regard to treatment, of course while bleeding continues you will keep the patient in bed and put no food into the stomach, but give a little ice to suck. Don't do transfusion with saline; that will probably only increase the bleeding. And don't give either ergot or alcohol, for they will increase the blood-pressure. I think you might give a little adrenalin solution, say five minims of 1 in 1000 solution every two or three hours, for it is said not to be absorbed from the gastric mucous membrane, and if not too diluted by the gastric contents it may stop the bleeding by its local action. I think I have found the liquor of perchloride of iron, mixed with an equal amount of glycerin—say a drachm of each—helpful in stopping the hæmorrhage. But it is difficult to know whether any drug stops the hæmorrhage, when the mortality from hæmorrhage is so low. Probably it would be a good thing to systematically give chloride of calcium, to increase the coagulability of the blood; at any rate, you might order ten grains three times a day. During the bleeding, and for two or three days after it has stopped, feed by the rectum; then give food by the mouth beginning with peptonized milk, small quantities

every two hours, and then day by day increase the food. Many a woman has been kept for a fortnight or more on rectal feeding under the impression that she had gastric ulcer when she had not, so that she lost health and got much thinner, for you must remember that all rectal feeding is starvation diet. Even when you are fortunate in having your enemata retained, you cannot get absorbed from the rectum more than 500 colories a day, which is very short commons. If you feed these women suffering from gastrostaxis quickly by mouth, you will find they can go out of the hospital in a fortnight. You may give a little iron to combat the anæmia caused by the loss of blood.

It may be urged that it is bad treatment to give these patients food so quickly, because they might have an ulcer of the stomach after all. I think many cases even of ulcer of the stomach are fed by the rectum far too long; and I do not think you will usually find that patients with ulcer of the stomach who bleed very much are likely to suffer from perforation. It is quite rare to receive a patient into the hospital suffering from perforated gastric ulcer who gives a history of recent hæmatemesis; I cannot recall such a case, and so we may conclude that even if you are in doubt whether the patient has a gastric ulcer or gastrostaxis you will do good if you feed by the mouth earlier than was formerly the custom.

Guy's Hospital Reports.

THE sixtieth volume of the Guy's Hospital Reports will be issued on December 6th, 1906. All students at Guy's Hospital who are subscribing members of the Clubs' Union are entitled to receive a copy free, and may obtain it from Mr. Mills, the Librarian, in the Wills Library. The price to other subscribers is 6s., and to non-subscribers, 10s., postage free. The contents of the volume are:—I. The Chronic Relapsing Pyrexia of Hodgkin's Disease—By Frederick Taylor, M.D. II. Mitral Stenosis and Pregnancy—By Herbert French, M.D., and H. T. Hicks, F.R.C.S. III. Life and Mechanism. Two Lectures delivered at the Physiological Laboratory, Guy's Hospital, May 17th and 24th, 1906—By J. S. Haldane, M.D., F.R.S. IV. Secretion by the Renal Tubules in the Frog—By F. A. Bainbridge, M.A., M.D., and A. P. Beddard, M.A., M.D. V. Two Cases of Malignant Embryoma of the Ovary—By J. H. Targett, M.S., F.R.C.S., and H. T. Hicks, F.R.C.S. VI. A Note upon the Relation of Traumatic Diabetes Insipidus to Glycosuria—By Herbert French, M.D., and C. B. Ticehurst, B.A. VII. The Fate of the Ovum and Graafian Follicle in Præ-Menstrual Life—By Thos. G. Stevens, M.D. VIII. The Prevalence of Trichocephalus Dispar—By Herbert French, M.D., and A. E. Boycott, M.D. IX. Carcinoma and Gastric Hydrochloric Acid. Thesis for Degree of M.D. Cambridge—By F. W. Morton Palmer, M.A., M.B., B.C. X. Notes on the Examination of the Blood—By A. E. Boycott, M.D. XI. Vaccines as an Aid to Surgery and Medicine—By Maurice G. Louisson, M.B., B.S. XII. Pyelonephritis as a Complication of Pregnancy—By G. Bellingham Smith. XIII. The Pathology and Treatment of Œdema, with special reference to the Influence of Diminished Excretion of Sodium Chloride on its Production—By Arthur F. Hertz, M.A., M.B. Oxon., M.R.C.P. XIV. Meckel's Diverticulum and Its Pathology—By Philip Turner, M.S., B.Sc., F.R.C.S. XV. The Platinochloride Test for Choline in Human Blood. By R. W. Allen, M.A., and Herbert French, M.A., M.D. XVI. Some Observations on the Effect Produced by Choline upon Animals—By E. Farquhar Buzzard, M.D., and R. W. Allen. List of Gentlemen Educated at Guy's Hospital who have passed the Examinations of the several Universities, or obtained other distinctions, during the year 1904. Medallists and Prizemen for 1905. The Physical Society, 1904. Clinical Appointments held during the year 1904. Dental Appointments held during the year 1904. List of Gentlemen Educated at Guy's Hospital who have passed the Examinations of the several Universities, or obtained other distinctions, during the year 1905. The Physical Society, 1905. Clinical Appointments held during the year 1905. Dental Appointments held during the year 1905. Medical and Surgical Staff, 1906. Medical School Staff—Lecturers and Demonstrators. The Staff of the Dental School, 1906.

In the forthcoming volume certain of the papers have already appeared elsewhere. This is a departure from former custom, but it is thought that the innovation will be welcomed, especially by Guy's men, in that it brings before them all the best work that has been done at Guy's Hospital during the year, collected together in one volume.

Change of Address.

Dr. Edward C. B. Ibotson, from 1, Barton Road, Dover, to 216, Great Dover Street, S.E.

Dr. Ernest F. J. Jensen, from 57 to 53, Devonshire Street, Portland Place, W. Telephone, 11 Mayfair.

Dr. Aston Key, from 67, Victoria Road North, Southsea, to 14, Clarendon Road, Southsea.

Mr. H. B. Rygate, F.R.C.S., from Gap House, Seizewell, Leiston, to Westerfield House, Ipswich.

Dr. C. M. Stevenson, from Guy's Hospital, to Hollymoor Asylum, Northfield, near Birmingham.

Mr. C. Peterson Weekes, F.R.C.S., from Elmwood, Cheam Road, Sutton, Surrey, to Eaglehurst, Howard Road, Southampton.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

In Lighter Vein.

A CONTRIBUTION TO THE PHYSIOLOGY OF THE CAT.

(Felis domesticus.)

THE purring of cats has recently been much studied, both in England by Cheshire, and in Germany by Tigrisklein and others, but its physiological significance is not yet completely understood. Even from Egyptian times it has been associated with emotions of joy. Schlaschenmann has investigated this point, and finds that if the blood of a cat which has had a good meal of salmon is circulated in the vessels of a hungry cat, the latter begins to purr. Much division of opinion has been called forth by the question whether purring is caused by an emotion of joy, or *vice versâ*. Katzfreund, Mewlenkski, and others, have taken up the latter standpoint, which is denied, however, by Nestlé, Grimalkin and Kilkenny working together, and by Schlaschenmann. Cussedein urges that both views should be rejected, and purring looked upon rather as a concomitant of joy than as a cause or effect. Doltz, by cutting away slices of the head of a purring cat, has been able to show that when the whole head is cut away purring ceases. He has also found a purring centre on the floor of the fourth ventricle. The intermittent intensity of purring sometimes observed is probably associated with a rhythmic activity of this centre.

Many experiments have been performed with the view of determining the frequency of the purrogenic vibration. Where such vibration takes place is still a disputed point. Felini has filled the nostrils of cats with solid paraffin, and finds that in these circumstances purring is stopped. He therefore considers it due to a vibration of the walls of the posterior nares. Bull has proved the same thing by inserting his finger in a cat's mouth. The physiologists of the German school have, however, thrown much doubt on Felini's conclusions, and they consider that the seat of purring must be relegated to the vocal cords, which, in cats, as is well known, are well developed. The frequency of the vibrations has been determined by placing a thermopile near the animal's nostrils and tracing the variations in current produced on a revolving smoked drum. Pourrée has investigated the relation between temperature and intensity of purring. His curves show that the intensity increases up to a certain point, then rapidly decreases, and at 100° has ceased entirely.

Various attempts have been made to correlate marked purring tendencies in cats with special breeds or skin-markings. Dowieson and his pupils in America have examined over 1,500 cats drawn from all grades of society with a view to this point. He finds the most marked purring in tortoiseshell tom-cats. Contrary to his expectations, he does not find any special tendency in Persians. Manx cats stand out well in the table; but, on the other hand, Manx cats artificially produced show a marked disinclination to purr. Dowieson's figures are as follows:—

Breed.	No. examined.	Purred when caressed. Percentages.	Purred when offered food. Percentages.
Tortoiseshell ...	2	100	100
Tabby	980	45	92
Black	230	53	98
Persian	187	47	95
Manx	80	48	96
"Artificial" Manx	25	0	15

It may be mentioned, in passing, that Hoakes, of Jericho University, U.S.A., claims to have discovered the bacillus of purring. At any rate, he has inoculated rabbits with his cultures, and obtained an antitoxic serum, which, when injected subcutaneously into cats, causes mewing. Hence, he argues, the bacillus is that which causes purring. Pending its confirmation, however, too much importance must not be attached to this theory.

It is therefore evident that the subject of purring is one which calls for continued investigation, but it is not improbable that the ultimate explanation will be found in the fact that it is some modification of the respiratory function, involving either inspiration or expiration, or both combined. It must be left to the rising generation of physiologists to decide this point for all time.

A. N. C.

Of Thomas Guy.

THE Governors of Mr. Guy's Hospital, having been censured as acting contrary to the intention of the Founder, by discharging persons from the benefit of his Charity, because they were incurable; they think it necessary to justify themselves: And to this end they have reprinted his Will, which alone might be sufficient to remove this mistake, his intention being therein very plainly expressed and declared.

He himself apprehended, and his suspicions were confirmed by those he consulted, that the word *Incurable* was of too large and indefinite a signification: And, indeed, People generally understood by it, such as labour'd under distempers, loss of limbs, blindness, and other natural or accidental deformities, and even age itself. And if taken in such extensive sense, his Hospital must soon have become an Almshouse, into which (to use his own Words) Parishes as well as particular persons would shift off from themselves the burden of their dependents and indigent relations, to be provided for during their lives: which he foresaw, and often spoke of with great concern to several of his Executors and other persons yet living, and accordingly has described the persons, for whose relief he designed his Hospital, to be such as are thought capable of relief by Physick or Surgery, and has submitted the several species or kinds of sick persons deemed or called incurables, and also

the time of continuing them in his Hospital to the Discretion and pleasure of his Trustees.

Besides this mistake about the conduct of the Trustees, there have been attempts to defame the memory of the Worthy and Charitable Founder himself, as doing no good in his lifetime; but heaping up a great estate with an ostentatious design of founding an Hospital at his death.

Facts best answer such invidious suggestions.

Many of his poor, tho' distant, relations, had stated allowances from him of Ten or Twenty Pound a year, and occasionally larger Sums: and to two of them he gave Five hundred Pounds apiece to advance them in the World.

He has several times given Fifty pounds to discharging insolvent Debtors.

He has readily given a hundred pounds at a time on application to him in behalf of a distressed Family.

These are some of his good deeds which are come to light since his death: from which everyone must be convinced, that his private acts of charity were many and great: and from their secrecy, that they flowed from a right principle.

Some of his more publick benefactions were as follows:

Early in life he began the erection of an Almshouse at Tamworth for fourteen Poor people, and maintained them to the time of his death, and then endow'd it for ever.

He contributed One hundred pounds in the year 1709 to the Brief for the poor Palatines, and the like sum to St. Thomas's Hospital on account of the admission of a great many of those among them who were sick and disabled.

When he met with such diseased and friendless objects as wanted the help of an Hospital, he was used to send them to St. Thomas's, with directions to the Steward, to supply them, at his Expence, with cloaths, and such other Necessaries as are not provided by the Hospital.

Sixteen years before his death he built and furnished three Wards in St. Thomas's Hospital, for the reception of sixty-four patients. He rebuilt two large Houses at the front of it, and adorned the entrance between them: which together cost him between two and three thousand pounds.

He gave one hundred pounds a year to that Hospital or eleven years successively, till he began to build his own; which he lived to see almost finished, and cost him about Fourteen thousand Pounds.

From these instances, it is easy, to judge, on which side Charity has been wanting.

[Advertisement to his Will, printed in 1732.]

BOOKS, ETC., RECEIVED.—Robinson's Urine Testing for Nurses, Dowse's Massage and Electricity, Ash's Hypnotism and Suggestion, Thomson's Pulmonary Phthisis, Gee's Auscultation and Percussion, Leonard's Bandaging, Handley on Cancer, The Practitioner, Journal of the Royal Army Medical Corps, and The Dublin Medical Journal, for November, 1906.

Reviews.

The price of books submitted for review should in every case be stated.

Medical and Pharmaceutical Latin. By Reginald R. Bennett. (J. & A. Churchill, London.) 6s. net.

Latin, as a scientific language, is dropping out of fashion. It has long ago ceased to be the diplomatic language *par excellence*, and as a medium for communications of scientific interest it is nowadays only used by the botanical taxonomist and the conservative writer of medical theses at Continental universities. Yet in a measure we preserve some remnants of it in our prescription writings, and although medical and especially pharmaceutical Latin cannot lay claim to be the pure and undefiled language which the commentators on Galen used, it is yet sufficiently useful to make it worth while studying. We need not here enter into a discussion as to the value of Latin in prescription writing, or as to the advisability of ordering drugs in the vernacular. A working knowledge of prescription writing is demanded in most of the finals, and at any rate some knowledge of abbreviations will prove of great service to the student. Mr. Bennett's little book is admirably suited for one who wishes to rub up his knowledge of the language, learned, perhaps only to be forgotten, in his schooldays. It opens with a condensed account of the grammatical rules—a grammar of the Latin tongue in tabloid form, in fact—and concludes with an admirable vocabulary: Between these is a large selection of Latin and French and German prescriptions, providing specimens of every imaginable variety of recipe that one can meet with.

For a book of this kind, so well adapted for the purpose it has to serve, so lucidly written, and so sound in its statements, we have nothing but approval. It may not be so scholarly as Pereira's *Selecta e præscriptis* (a work which few modern students, unfortunately, are acquainted with), but it is in every way as useful as, and for present day purposes even more serviceable than, that historical volume. There are, indeed, a few points at which the purist might cavil. The modern tendency of assuming the ℞ which precedes every prescription to stand for the second person singular of the imperative active of *recipio*, and of insisting that in the prescription the name of the drug should be in the genitive, and the quantity to be used in the accusative case in accordance with that assumption, is to be regretted just, as much as is the modern tendency to drop the "u" in honour and to write "centre" "center." But it is a tendency so firmly rooted that the gentle reminder that the ℞ meant something else entirely different would only raise a smile of incredulity. So we go on writing "tinctura asafœtida fluidunciæ dimidium" (not that any of us ever trouble ourselves to write it in full), and end up with "aquam ad," under the impression that the verb adde "is understood." Under these circumstances Mr. Bennett's little treatise will be a help to every student

who wishes to master all these intricacies, just as it will be a handy book of reference to the man who desires to know the correct Latin equivalent for "isinglass," "calves foot jelly," or "to be kept in a gallipot away from the dust." A special feature is the useful appendix containing valuable information about foreign prescriptions and the metric system. The book is neatly printed and fairly strongly bound, and is moreover of a handy size.

A Manual of Diseases of the Eye. By Charles H. May, M.D. New York, and Claud Worth, F.R.C.S. Eng. Pp. viii. and 400. Illustrations, 335. Coloured plates, 20. (Messrs. Bailliére, Tindall & Cox.) 10s. 6d. net.

This is a most excellent work, and should be in the hands of all students preparing for surgical examinations. It is quite the best elementary book on the subject that we have yet read, and is marvellously cheap considering the number of coloured plates. These coloured plates are an especial feature of the book (though we wish that they had been fastened in more securely), and give an excellent idea both of the outside of the globe under various pathological conditions, and also of the ophthalmoscopic appearances of the fundus. In the text are many very good diagrams and photographs, the latter of which illustrate very well the various methods of examining and operating on the eye.

We must draw attention, however, to one very serious discrepancy: in the description of Cataract Extraction (sic) we are told to remove the eye speculum after making the incision and opening the capsule, and yet on the preceding page there is a photograph of the operator delivering the cataract with the lids still held open by a speculum. It is an important point in technique, requiring definite explanation. The after-treatment of cataract cases is very well described—better even than in the larger text-books.

There is an excellent description of Glaucoma, and the author's various classifications of Cataracts are very good and clear. In the description of Enucleation of the Eyeball, we should have liked to see emphasis laid on the necessity of dividing the optic nerve as far back as possible if the enucleation be for malignant disease, and we cannot agree that evisceration should never be performed for foreign body. But these are small blemishes in a book that is really an excellent students' manual.

The Ship Surgeon's Handbook. By A. Vavasour Elder. Pp. 167 and viii. (Messrs. Bailliére, Tindall & Cox.) 3s. 6d. net.

Many men devote a few months or a year to travelling as ship's surgeon soon after they are qualified, and they will find this book most invaluable to read before they start, and to keep for reference during the voyage. Practice on board ship, with its altered conditions, and absence of all higher authorities on whom the young surgeon can rely for help and guidance, requires peculiar qualities in a medical man.

The first chapter contains an excellent account of how to get a ship, what ships to avoid, and what precautions to take when signing on; it concludes with an excellent warning not to stick to the sea too long, if there is any intention of settling down into a shore practice.

There is a chapter on sea sickness, which we cannot discuss, as we have never tried the remedies recommended, but in the rest of the book many hints are given the excellence of which we can well appreciate. Get your sun topee at Port Said on the way out, where it is much cheaper and quite as good as in London; take a few white suits out as patterns, but have most of your stock made in India by the natives; such are specimens of the practical hints with which the book abounds. A book we advise every man to buy when he intends "to take a ship out."

The Medical Annual Synoptical Index for the Six Years 1899–1904. (J. Wright & Co., Bristol.) Pp. 270. 7s. 6d. net.

We have so often praised in these columns the appearance of the review of the year's medical literature which is contained in the Medical Annual, that it is a pleasure to welcome the Synoptical Index thereof which has just been published.

The making of indexes is almost a distinct profession—one requiring much skill and a literature of its own. Many a book has been spoilt for the want of an index, and for that reason alone the *Saturday Review*, in its palmy days, often uncompromisingly slated a book. The periodical publication of an index, then, is almost essential for the proper appreciation of a series of annual books of reference such as the Medical Annual, and the publishers, having recognised this fact, are to be commended for the admirable way in which they have carried it out.

Under each subject are given, not only references to the articles in the various volumes, but also a short synopsis of each article, especial attention being paid in each case to treatment. In fact, the only fault we can find is that pathology is often neglected in favour of treatment, but that is a fault in the aim of the work rather than in its execution, for which we have nothing but praise.

Cross references are plentiful, and every help is given to the practitioner brought to a standstill in his treatment of a case and anxious for fresh ideas.

Guide to Anæsthetics for the Student and General Practitioner. By Thomas Luke, M.B., F.R.C.S. Edin. Third Edition. (William Green & Sons, Edinburgh.) 5s. nett.

This useful little manual has been somewhat altered in the text, but the changes, on the whole, have been necessary and desirable. The introductory article is exemplary in its clearness, and in the brief historical introduction of the subject which it furnishes. In the chapter dealing with that important question, the choice of a suitable anæsthetic, we notice a few alterations,

notably the mention of the views of some surgeons with regard to the advantage or otherwise of a general anæsthetic in operating on thyroid cases. The chapter on Local Analgesia is particularly well written, and mention is made of Oberst's, Schleich, Tuffier, and Biers' methods. Finally, a useful summary of the reports of the various anæsthetic commissions is given. The book is a small one, comprising only a hundred odd pages of large print, but its teaching is sound, and it can be recommended as a useful text-book on the subject.

Esmé: a River Idyll. By R. Beadnell Gill. (J. Rae, Ltd., Croydon.) 1s.

This little book has the distinction of having for its author a present Guy's man, who is doubly to be congratulated if, as is hinted in a somewhat cryptic dedication, his heroine, Miss Haldane, has a real prototype. For the book, or rather thirty-seven pages of the forty it contains, deals with the sayings and doings of this lady and a Mr. Thompson, and relates, mainly in the form of dialogue, how in June the seductive riverside and a handkerchief brought the pair together, how in September their acquaintance ripened, until in the following June they were so situated that they could combine to play a mighty practical joke upon a somewhat ingenuous Reggie.

The charm of Mr. Gill's writing lies in its naturalness. He has the gift, on the one hand, of making the surroundings real and portraying the actual "river atmosphere," and on the other of disclosing the personalities of his characters by their conversation without description. Reggie, for example, though practically nothing is told us about him, is an individual made perfectly real and recognisable from the few words he says. The dialogue, too, is both clever and spontaneous, and the points of the repartee made naturally without being previously worked up to or subsequently "underlined." The whole book is smart, light, and ephemeral—those accustomed to the classics of modern dialogue will miss the flashes of deeper insight which make the reader think as well as smile, but there are many neat passages here. We may quote:

"All men are—er—perverters of the truth, said Esmé, sagely.

"I fear so," said I, "and then it is curious how persistently women are demanding the rights and privileges of men!"

Here and there there is a curious jerky prolixity of descriptive phrasing which is unsuitable to the type of book, and occasionally, but quite rarely, old artifices of language creep in and the badinage drops to the obvious.

The last three pages of the book contain as many poems, collected under the name of "Rivers and Hills." We scarcely think Mr. Gill was wise in including them in one cover with the Esmé tales—they are too few in number and different in thought. They are songs of nature and out-door life, not strikingly original in subject-matter, but well constructed, swinging and melodious. Several of the verses are especially vivid—

". . . . the punt pole snaps in two
And on hands and knees we crawl and cling
To a tow-line taut as a fiddle-string
'Neath a sky of leaden hue."

The last piece strikes a deeper note, and is, in our opinion, the finest of the three.

Altogether the book is both amusing and interesting, and we should not have been at all averse to spending a little more time by the house-boat and the backwater in the company of Mr. Beadnell Gill.

Novelties.

The Equipoise Couch.

The Equipoise Couch Company, whose adjustable bedstead was noted in this column some time ago, writes to us as follows:—

"We hasten to correct, if you will allow us, a technical mis-description in your notice of the Equipoise Bed. Your reference to the 'simple yet ingenious rack-work slide, by means of which the patient can be raised and lowered into almost every variety of position, from the flat dorsal to one perfectly upright,' is hardly correct, as this rack-work is merely the locking arrangement which holds the bed fixed at any angle desired. The action is, as the *Lancet* briefly describes it, 'the patient releases a catch: the balance principle does the rest.' Of course, as you say, the nurse can do it for him, but, unless quite helpless, he does it himself, thus saving the nurse the exertion of lifting or lowering him. . . . As regards your suggestion as to the benefit of raising the feet and lowering the head—as in cases of shock—we merely take off the head end of the bedstead, and rest the side rails on the floor. The back part may be set level, or with the head lowest, or slightly raised. The balance is still operative, allowing change of position without work, and the bend at the seat prevents slipping—this, by the way, is a hint that may be of use to general practitioners in an emergency with ordinary bedsteads."

Catheterpurin.

This is a new lubricant for catheters, prepared from the prescription of Prof. Leopold Casper, of Berlin. The objection alleged against the ordinary sublimate-oil lubricants is that the oil is never properly sterile, and that it further interferes with cystoscopic work. In catheterpurin the antiseptic is oxycyanate of mercury in the proportion of 1 in 500, in a sterile mixture of glycerine, water, and gum tragacanth. It is claimed that this lubricant does not irritate, and that it is absolutely sterile, even after exposure to the air for some days. It is practically odourless, and is easily washed off the instruments with cold water. It is put up in metal tubes, which are very handy for pocket use. The London agents are Messrs. Reitmeyer & Co., 63, Crutched Friars, E.C.

Sport.

Cricket.

CRICKET AVERAGES, 1906.

BATTING.

NAME.	Innings.	Times not out.	Total No. of Runs.	Highest score.	Average.
E. P. Barnett ...	9	2	766	154*	109·44
G. C. Chase ...	8	1	244	75*	34·28
N. V. H. Riches...	5	1	133	52	33·25
H. Archer ...	10	0	281	77	28·10
M. M. Munden ...	17	2	444	101	27·68
P. Smith... ...	14	1	266	55*	20·46
A. M. Tolhurst ...	12	3	177	46	19·46
H. V. Gibbons ...	17	2	267	64*	17·13
S. W. Jamieson...	10	1	61	24	6·10
F. Kahlenberg ...	13	3	38	13	3.80
Also batted:—					
G. C. Covell ...	13	1	181	42	15·08
W. Ingram ...	8	3	81	19*	16·20
W. T. Clarke ...	8	1	77	21*	11
P. V. G. Pedrick	5	0	97	32	19·40

* Signifies not out.

BOWLING.

NAME.	Overs.	Maidens.	Runs.	Wkts.	Average.
F. Kahlenberg ...	302·5	93	622	67	9·27
S. W. Jamieson ...	123	16	384	20	19·20
G. C. Chase ...	107·4	12	391	20	19·55
A. M. Tolhurst ...	64	26	192	6	32
Also bowled in less than 5 matches:—					
N. V. H. Riches ...	44	11	109	4	27·25
H. Archer	32·2	2	178	6	29·66
P. Smith	19	2	77	2	38·50
W. T. Clarke ...	22	0	104	2	52

Record of season.—Played, 18; Won, 8; Lost, 7; Drawn, 3.

The following centuries were scored during the season:—

E. P. Barnett v. Beckenham, 127; v. Wanderers, 102; v. Granville, 154 not out; v. Thespids, 128 not out; v. Westminster Hospital, 126.

M. M. Munden v. Westminster Hospital, 101.

Rugby Football.

GUY'S v. V.C.S. OLD BOYS.

Played at Honor Oak Park on November 3rd. J. P. Jones was unable to play and McEvedy took his place, while Sprague played as substitute for Archer. The ground was in bad condition. We lost the toss and defended the Pavilion end. The game had not been long started when the opposing forwards kicked the ball down the ground. Duke failed to field and almost let them in. Soon afterwards one of their three-quarters got away, but was brought down by Duke. Our forwards returned with a dribble to half-way. After some even play Saunders leading a rush kicked across to Lee, who scored. Saunders converted. Shortly afterwards we were almost in again, but the ball was knocked on a few yards from the line. The opposing forwards relieved with a good rush and play returned to mid-field. They again looked like scoring when Duke brought his man down in fine style. Our forwards relieved with a characteristic rush. Saunders obtained the ball from a line out and put in a long kick. Half-time arrived with no further score.

In the first few minutes of the second half their third line got going, and were only held up by the fine tackling of our backs in our twenty-five. The forwards, headed by Saunders, took the ball back to half-way. Digby then made an opening for McEvedy, who was held up on the line. Our opponents relieved with a kick, but our forwards took the ball back to their twenty-five, where a free kick was given us, and Saunders kicked a goal. On restarting, Saunders got away out of touch, and passed to Stringer, who was pushed into touch after a good run. Play was kept in their twenty-five by Rutter making a nice run. A pretty bout of passing, in which McEvedy, Lee and Stringer took part, enabled the latter to score. The kick failed. Directly after the drop-out, the opposing three-quarters passed well, but were held up by Monaghan. Again they got going, and this time were able to score. The kick failed. Play settled down in our twenty-five, when Saunders, coming away from the scrum, scored, after a magnificent dribble of three-quarters the length of the field. The kick at goal was unsuccessful. From the kick-out, Mullins made a mark and put in a long kick. McEvedy then made a good run, but unfortunately dropped the ball when he was clear of everybody. A few minutes later he had a shot at goal, which went wide. For the last ten minutes we were "all over them." Pinching and Williams dribbled over the line, but were unable to score. The whistle then went for no-side, leaving us winners by 14 points to 3.

Saunders was in great form. The forwards all played well. Their packing is now very good. They are full of dash. A little more short passing would be a good thing. The three-quarters were slow at getting on to their men. Their tackling was better. Monaghan and Duke played well. Team :—

GUY'S.—Duke (back); Stringer, Digby, Lee, Rutter (three-quarters); Monaghan and McEvedy (halves); Saunders, Pinching, Alcock, Mullins, Williams, Hinde, Crook, Sprague (forwards). Referee, Mr. A. Sloper.

Association Football.

GUY'S v. OLD CRANLEIGHANS.

This match was played at Honor Oak, in dull weather, on Saturday, October 27th, and ended in a win for the hospital by the wide margin of 6—1. We had a good team out, Barnett and Robertson being the only absentees. Pedrick was successful in winning the toss, our opponents therefore opening the game. Within a few minutes, Whiteley had placed us one up, the final shot being a simple one from a close range, following upon a scramble in front of goal. Play was fairly even for the next fifteen minutes, and then Whiteley succeeded in

placing another shot well out of the goal-keeper's reach, and he supplemented this with a third goal almost immediately afterwards. Then the Old Boys attacked, and their centre-forward was successful with a good long-range shot, which Wood ought to have saved. Our next goal was obtained by Hinde, he successfully diverting a pass from Whiteley into the net, so that at half-time we were leading by 4—1.

During the second half we were constantly on the attack, and claimed far more of the game than our opponents, with the result that Whiteley and Hinde made further additions to our score. The Old Boys gained some half-a-dozen corners, but were unable to turn them to account, and it was rarely that Wood had any occasion to exert himself, and we won very comfortably by 6—1. Team :—

GUY'S.—C. A. Wood (goal); K. H. Hole, H. R. Bastard (backs); A. Zorab, A. F. W Denning, P. V. G. Pedrick (halves); F. A. Barker, E. B. Hinde, W. F. Whiteley, C. Witts, R. M. King (forwards).

GUY'S HOSPITAL v. CROYDON COMMON.

SURREY SENIOR CUP—SECOND ROUND.

In the above competition this year we have been singularly lucky, for a bye enabled us to enter the second round without having taken an active part in the first—and in this round we were favoured with choice of ground—a goodly asset, the more accentuated accordingly as one recognises the class of spectator one may meet with in these games, and the possible influence of such upon the referee, as an example of which one may mention our cup-tie at Godalming last year. This match was played at Honor Oak under favourable conditions, on Saturday, November 3rd. Berry and Barker were unable to turn out, but we were able to get together a fairly representative side. Pedrick having lost the toss, Whiteley set the ball in motion, but Croydon soon attacked, the ball being eventually sent behind. During the first few minutes we were chiefly on the defensive, but gradually we began to get more of the game, although our forwards found it very difficult to make much progress through being constantly penalised for offside, owing to the fact that Croydon played the one-back game. However, our efforts met with success after play had been in progress about fifteen minutes, Whiteley finishing up a good run with a magnificent shot. Shortly afterwards the same player, from a pass from Edey, scored again, this time taking the goal-keeper completely by surprise by turning quickly and sending in a fast one from twenty yards range. At this stage we were going strong, the halves defending well, and in turn feeding their forwards with great judgment. Whiteley was almost through again, but was fouled within the penalty area. However, he missed that opportunity of scoring again. Edey sent in some good shots, but was unable to score. Our next score came from Whiteley after a good combined run, he putting through from close range. Although we had secured a lead of three goals Croydon frequently attacked strongly, and Wood was called upon to clear some good ones, which he did in good style—one or two corners being finely punched away. Hinde, securing the ball near the half-way line, ran right through and scored our fourth goal, this being the extent of the scoring before half time.

After the resumption of play, Croydon gave our defence a trying time, and Wood saved us on several occasions, placing a couple of good ones over the bar. However, their efforts became less dangerous and our forwards again had more of the game; but, at last, Croydon succeeded in scoring from a penalty. This seemed to "buck us up a bit," with the result that Whiteley scored again, placing the ball into the far corner of the net after drawing the goalkeeper out from goal. Although holding such a strong lead we were kept busy, as our opponents never gave up hope, and tried their hardest to reduce the margin, but were unable to score again, and we were left winners of a keen game by five goals to one. Team :—

GUY'S.—C. A. Wood (goal); E. G. Robertson, H. R. Bastard (backs); A. Zorab, A. F. W. Denning, P. V. G. Pedrick (halves); E. B. Hinde, T. H. Edey, W. F. Whiteley, C. Witts, R. M. King (forwards).

REMARKS.—The team, as a whole, were well together and each man was a trier. Whiteley was in excellent form, and he has never played so well for us as on this occasion. Although he has scored several goals for us before, he has not previously demonstrated such shooting abilities. If he serves us in like manner in the Inter-Hospital Cup ties the Cup should certainly remain in the smoke-room for another season. Edey, at inside left, got on well with Whiteley, and sent in some good shots. Hinde, although playing in a new position, worked hard, and his score was a good effort. King put in some good work on the extreme right, but was neglected too much by Witts, who has yet to find his "shooting boots." Our halves proved once again that they are the best line in the team. In attack or in defence they were alike excellent. "Gussie" was in his old position for the first time this season, and although he says he is going to give up "footer," it is earnestly hoped he will still continue to play for that side which he has lead to victory on numerous occasions. The backs had plenty to do and worked hard. Wood, in goal, played a good game, some of his punches being excellent; we are lucky in possessing such a reliable man in the last line of defence.

Births.

NICHOLLS.—On October 27th, at Ellerslie, Eltham, Kent, the wife of Frank J. Nicholls, M.B., B.C. Camb., of a son.

POLLOCK.—On October 19th, at Valletta, Malta, the wife of Major C. E. Pollock, R.A.M.C., of a daughter.

REID.—On November 11th, at Lyndholme, Chertsey Road, Woking, the wife of Percy P. Reid, L.D.S. Eng., of a son.

SPRIGGS.—On November 9th, at 48, Bryanston Street, W., the wife of E. I. Spriggs, M.D., F.R.C.P., of a daughter.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

A YEAR ago a reader of the GAZETTE suggested certain changes in our annual Christmas programme. In March last these suggestions were repeated, and the present seems a propitious time to draw attention to them once more. Christmas is almost upon us, and rehearsals and arrangements are, like Gil Blas' pie, "almost completely finished." But it seems that the old-time programme is to be adhered to; at any rate, no whispers of possible improvements have passed into the publicity of Park or Colonnade.

THE suggestions which our correspondent made are at least worthy of some attention. Briefly put, they amount to this: That the Carol Singers from St. Saviour's should serenade the patients on Christmas Day instead of on Christmas Eve; that the nigger performances and the out-patients' tea should fall on Boxing Day instead of on Christmas Day, as now, and that Christmas Day should be made a patients' visiting day. Further, it was suggested that there should be fewer public ward concerts, and that some of these entertainments, at least, should be reserved for patients and their personal friends. A final suggestion was that there should be a short hospital service some time on Christmas Day.

IT seems to us that much is to be said in support of these suggestions, while the case against their adoption is but a weak one. Those who attend the out-patients' tea will not object, we take it, to ante-dating or postponing their entertainment twenty-four hours. The conservatism of the Borough is not so close or cramped, either, that it will insist upon being "niggered" to on Christmas Day, and on that day only, while we believe, with our correspondent, that there are generally some patients in each ward who prefer, for various reasons, a quiet to a rollicking Christmas Day. The suggestion that visitors' day should be on Christmas Day is a good one, but it can only be carried out if the other suggestions are adopted.

FINALLY, there are the proposed alterations with regard to the ward concerts, which have, we understand, the cordial support of several of the Sisters. The objections to the present system of crowded wards and multiplied performances are too obvious to need recital. Let it be borne in mind that, after all, the ward concerts are primarily and pre-eminently for the benefit of the patients, and that outsiders, even

though their attendance has been sanctioned by custom of many years' standing, are a very much minor consideration. "A shorter programme and a smaller audience" possibly crystallises the Sisters' and patients' desires in the matter as succinctly as the "clean hearth and the rigour of the game" epitomised the immortal Sarah's opinion on whist. The shorter programme can be easily arranged, and the smaller audience may be obtained by limiting the outside attendance to the personal friends of the patients. These suggestions, although they may not commend themselves to everyone, are at least worthy of some consideration from those who would be mainly responsible for adopting or rejecting them — the Superintendent, the Matron, the Sisters, and the Residents.

That useful, if somewhat ephemeral, compilation, the Guy's Hospital Student's Calendar —a work which the student may obtain, gratuitously, on application to the Medical School Office—shows that a change has been made in the dates for one of the annual examinations. The examinations for the Treasurer's Gold Medals will, next year and subsequently, be held in May instead of in June—a change which will be appreciated by Durham, Oxford and Cambridge men, and will not be objected to by others. The examinations for the Golding-Bird and Beaney Scholarships remain as before —the former in March and the latter in July.

On Tuesday evening, December 11th, at 8 o'clock precisely, the Guy's Hospital Musical Society will give a grand concert of vocal and instrumental music in the Court Room. The concert, which will be under the direction of Mr. Henry Taylor, is the first of the session, and after the excellent evening which the Society gave us last session, we are justified in expecting great things this time. An excellent programme, we hear, has been arranged, consisting of various glees, part songs, madrigals and choruses by Sullivan, Mendelssohn and Eaton Fanning. There will be two quartettes, male voice and mixed, and vocal and instrumental solos have been arranged for. The orchestra, which has made considerable progress since its formation at a comparatively recent date, will contribute Mozart's "Nacht-musik." Tickets, at the moderate price of half-a-crown each, may be obtained from the Matron, Sister Amy, the Hon. Secretary, or any of the Committee members, while full particulars of the concert are to be found on the bills posted in the Colonnade and elsewhere.

The next meeting of the Pupils' Physical Society will be held in the Library on Saturday night, December 8th, at 8 p.m. It will be a Clinical Evening, devoted to the exhibition and discussion of interesting cases from the medical and surgical wards.

In the present issue Mr. Henderson, the Secretary of the Rifle Club, publishes his promised statement of the estimated cost of a miniature rifle range, together with a letter giving an outline of the progress which has been made in the matter since the preliminary letter was published in the Gazette. The dissecting-room site has been fixed upon, and the estimate—a decidedly moderate one—has been prepared. For the small sum of £15 the Hospital may possess a thoroughly good range, with an armament of two ·22 War Office pattern rifles. The draft rules, which are appended to the estimate, will commend themselves to members, though they would seem to need some amplification here and there. It now remains only to find the money, and that, in view of the enthusiasm with which the proposal has been received, ought not to be a very difficult task.

An exhibition of the value of £120 is to be awarded by the Fishmongers' Company for original research in pathology in direct relation to medicine and surgery. The exhibition is open to students of medical schools or hospitals in the County of London, who have obtained a qualification to practise within eighteen months previously, and who shall be nominated by the authorities of their individual medical school. Applicants for this exhibition should send in their names to the Dean on or before the 6th December.

There are few Guy's men who can boast of such a record, so far as their active connection with this ancient Foundation is concerned, as Mr. John Prestidge, of the Works Department. Mr. Prestidge, who is a plasterer by trade, began his work in the department exactly 45 years ago, following his father, who in his turn had followed his father and grandfather to the Works Department. Four generations of Prestidges have thus served the Hospital, and their combined period of activity makes up the respectable total of nearly 160 years of service —a record which, we venture to think, no other London hospital can beat or equal. Excellent as his record is, however, Mr. Prestidge is closely rivalled by one of his colleague workmen, Mr. Tillbury, who for close on 44 years has been connected with the Laundry Department. As engineer in this department his period of active service was almost unbroken. When the new plant was put in he relinquished his office and attached himself to the Works Department, where he is still in active employment. On the occasion of the 45th anniversary of Mr. Prestidge's entry into the Works Department, his colleagues in the department, some three weeks ago, decided to present him with a small mark of their respect and appreciation. The presentation, which took the form of a handsome watch chain, with a pendant shield suitably inscribed, was made by the foreman of the Works Department, who in the course of his remarks referred to Mr. Prestidge's unbroken record of active service, and expressed the hope that the Works Department may continue to have his services for yet a long period of years. On behalf of the Gazette, and, we feel sure, also on behalf of every Guy's man, we desire to add our congratulations, and to wish Mr. Prestidge many happy returns of the day.

The match against Dublin University resulted in the defeat of our visitors by a goal and two tries against a goal and a try. Notwithstanding the state of the ground, as our reporter puts it, —and from a spectator's point of view, notwithstanding the weather also—the match proved a capital game. The visitors made the most of their chances during the first half, but during the second half our team got and maintained the upper hand. It is the first time that the Irish University has honoured us with a visit, and we sincerely hope that in the future the match with Dublin University will become an annual event. A word of cordial thanks is due to Mr. Mullins, to whom, we understand, belongs the main share of the credit for persuading the Irishmen to try their luck against us. One need not be a keen footballer to appreciate the value of these larger items on the first team's programme. From a hospital point of view they are excellent, and considered from other aspects, they are scarcely less so.

A general meeting of the Students' Club has been called for Thursday next December 6th. Dr. Hale White will be in the chair, and the agenda list comprises the question of the catering and the purchase of a telephone for the club rooms. Both subjects are of importance, and it is to be hoped that members will turn up in full strength and thoroughly thresh out the question of the catering. It is high time that the hardy annual was eradicated, and those who have been zealously cultivating the plant in the past should make a point of turning up and giving the meeting the benefit of their experiences in the dining-hall. At the same time there are many members who fully appreciate the efforts of the Steward towards bettering the condition of things in the dining-hall, and it is imperative that they, too, should turn up to put the other side of the matter before the meeting. On an important question like that of the catering, it is highly desirable that all sections should have a say. A hasty decision taken by the general meeting may result in the establishment of a sorrier state of things than existed prior to the alterations to the College kitchens.

From the Gazette's Special Pathologist.

I. E., Middlesborough.—Tubercle bacilli have not been detected in this specimen of sputum, which is non-purulent in character. No abnormal constituents have been noted in the specimen. PATHOLOGIST.

Clinical Notes.

A Case of Chancre of the Lower Eyelid.

M. A. H., aged 6 years, came to the Royal Eye Hospital, to Mr. Ormond's Out-patients on Wednesday, October 3rd, 1906, complaining of a swelling on the right lower eyelid. Her mother, who was with her, stated that about six weeks ago patient had knocked her right eye against some palings when playing in the yard. Not much notice was taken of the injury at the time, though the eye was bathed in warm water. As it did not get better, the child was taken to the Miller Hospital, where she was treated for about a month. As her eye did not improve, her mother brought her to the Royal Eye Hospital.

When seen at Out-patients, the right eye was swollen, and patient kept the lids tightly closed. There were lachrymation and photophobia. On the lower lid, near the outer canthus, extending inwards to the junction of the outer third with the inner two-thirds, was an oval swelling, reddish in colour, and about the size of an almond. The edges were hard and indurated, and the upper surface, which came into contact with the upper lid, was raw. The eye lashes were absent. On the inner canthus the upper lid was slightly swollen. The lower palpebral conjunctiva was swollen and œdematous, and of a cork-screw appearance.

Both tonsils were swollen, and on the upper part of the right tonsil was an ulcerated area about the size of a pea. There were enlarged glands in the submaxillary region on both sides, which were painful. Along both borders of the sterno-mastoids were some hard, shotty, non-painful glands. On the buttocks was a well-marked papular, ham-coloured rash. A diagnosis of primary chancre of the lower eyelid was made. Patient was admitted into Guy's, and under the influence of anti-syphilitic treatment the rash, sore throat, and swelling on the eyelid improved.

The above case, for permission to publish which I am indebted to Mr. Ormond, is worthy of record, in view of the comparative rarity of primary chancres affecting the eyelids, of which indeed very few cases are to be found in the literature. Mr. Ormond has seen two cases besides this one. One[1] he showed at the Ophthalmological Society, in 1901, as a case of primary chancre of the retro-tarsal fold of the upper lid in a man. The other was seen at the Royal Eye Hospital, in 1903, as a primary sore on the upper lid near the inner canthus. When first seen the patient in this case had a few enlarged glands, but no rash or sore throat. Subsequently, however, a rash and sore throat developed, although anti-syphilitic treatment had been begun. It is interesting to note how the primary affection occurs in these cases. At the meeting when Mr. Ormond's first case was shown, the President suggested that in some cases the site might have been inoculated by nasal mucus, and observed that when travelling in the Black Country he had seen the men extract foreign bodies from the eye and then rub nasal mucus into the eye to replace for the time being the denuded epithelium. Another member stated that in Sheffield the workmen commonly removed foreign bodies from each other's eyes, and in so doing they often infected the part with septic infection, and in some instances set up specific inoculation. Tepliaschin, a Russian physician, gives an account of an epidemic of syphilis introduced into a village by a "magician" who professed to remove foreign bodies from the eye and to cure trachoma with his tongue This man was affected with the disease and infected sixty-eight persons, in eight of whom the primary sore appeared on the eyelid.

Fournier[2] gives a table of extra-genital chancres numbering 642 cases in all, seven of which were chancres of the eyes. Ricoid's[3] list of 824 extra-genital chancres includes one case of primary sore on the eyelid. Bumstead[4] gives a table of 471 cases in men who were seen at the Hôpital du Midi. Only one case of these was a primary chancre of the eyelid, which was followed by well-marked secondary symptoms. In 130 female cases M. Carriére did not find one case in which the sore affected the eyelid. Clerc[6] gives one case, in which the eyelid was presumably inoculated from scratching with dirty fingers. Wallace[5] says that primary syphilis, produced by self-inoculation, occasionally occurs at the edge of the eyelid, commencing as a pustule simulating a sty.

Mr. Brailey had a case of primary chancre of the right lower lid in a man aged 26. He describes it as follows: "A small irregular ulcer apparently starting from the inter-marginal border of the lid, with sharply cut edges, and surrounded by a slightly indurated area. Symmetrical ulceration of fauces, and soft palate. No rash was seen and no history could be obtained." An excellent painting of this case can be seen in Hunt's room in the Museum.

Desmaries[7] describes a case of chancre of the eyelid in a midwife. Haynes Walton[8] remarks that he himself has never seen a case, though Cullum, Mackenzie, Hill, and Lawrence had described cases they had seen. Hutchinson[9] records two cases of conjunctival chancre which came under his observation. Lawson[11] describes a case occurring in a child under two years of age, in which the sore was followed by a copious rash, while Mackenzie[10] gives notes of one case of a primary chancre on the conjunctiva which he had seen. W. W. C.

References:—[1]Transactions of the Ophthalmological Society, 1901, Vol. 21. [2]Fournier—"Treatment and Prophylaxis of Syphilis." [3]Maunder's Translation of Ricoid's Lectures on Chancre. [4]Bumstead—"On Venereal Diseases." [5]Wallace—"On Venereal Disease." [6]Clerc, Maladies Ven., p. 204. [7]Desmarie's "Maladies des Yeux." [8]Haynes Walton—"Diseases of the Eye," 3rd edition. [9]Hutchinson—"Diseases of the Eye." [10]Mackenzie—"Diseases of the Eye," 4th edition. [11]Lawson—"Diseases of the Eye." Other references to

primary affections of the eyelids and conjunctiva are: Gaz. De Hopitaux, Paris, 1866, Vol. 39, p. 40. Henry—American Journal of Syph. Dermat. T. Hutchinson—Medical Times Gazette, 1872, 432. W. P. Smith—"A Case of Chancre of Eyelid,"—West. Lancet, San. Fran., 1872. E. Bernard—"Syphilis." Rollet—Mal. Ven., 1860.

ONE MILLION SHILLING FUND

IN AID OF THE

HOSPITAL APPEAL, 1905-6.

Twenty-eighth List of Collections.

(Received up to November 30th, 1906.)

The number inserted in brackets after the name indicates the amount of previous individual collections.

Name.	Shillings.
Amount previously acknowledged ...	73,911½
"An Old Guy's Nurse" (100s.)	100
Allen, Miss M. C. (28s.)	3
Astley-Cooper, Sister (300½s.)—S. Joseley ...	10
Bisshopp, Dr. F. R. B. (838s.)—"C. O. M.," 100; Mrs. J. Vannick, 20	120
de Mesquita, Dr. S. B. (40s.)—Messrs. M. & S. Lyon	21
Ditch, J. R. D.—M. Powell	5
Dottridge, Miss (15s.)	5
Fagge, Mrs.—Collection	20
Flower, N. (164s.)—Mr. Rendall	6
Jackson, Miss Frances (27s.)—Miss Vere David	45
Karpeles, Mrs. J. N. (1,513½s.)—Mrs. Hubbard, 6; H. Warsehawski, 2; H. W. Barnett, 7	15
Lemon, Miss A.—H. Barton, 1; C. M. Webster, 1; Miss F. Ashcroft, 1; H. Lemon, 1 ...	4
Odgers, F. M.—Collection	10
Scott, Miss F. L. (31s.)—Self and Miss Spreckley	2
Willan, Dr. G. T., Senr. (107½s.)—Miss Marsh, 10; Miss Acheson, 3	13
Young, Dr. F. C. (22s.)—Colonel Wedderburn	20
	74,310½
Further collections from sources outside the Hospital	12
TOTAL ...	74,322½

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Payment is a matter of arrangement, and the fees that the GAZETTE *can offer are merely nominal, but if the writer desires any remuneration that fact should be stated.*

Pupils' Physical Society.

THE third meeting of the session was held in the smoking-room in the College on November 10th, Mr. T. B. Layton in the chair. Mr. J. L. Rankine read a paper on "The Influence of Guy's on Medicine in England." Twenty-three members were present.

A meeting of this society was held on November 24th, in the Wills Library, Mr. Knight in the chair. Pathological specimens were shown by various members, and discussion followed. The specimens creating most interest were a large hæmorrhage into the head of the pancreas, the pathology of which was most obscure; a suppurative nephritis in a child with no obvious cause; and a probable specimen of primary carcinoma of the liver. All the specimens had some points of interest, and the complete list is as follows:—

Mr. Minett—Hæmorrhagic cyst of pancreas.
Mr. Miller—Infective endocarditis of gonorrhœal origin.
Mr. Bartlett—(*a*) Suppurative nephritis in a child. (*b*) Malignant glands invading the jugular vein. (*c*) Organs from case of Banti's disease.
Mr. Rippmann—(*a*) Anencephalic fœtus. (*b*) Primary growth of liver.
Mr. Laidlaw—Gastric ulcer becoming carcinomatous.
Mr. Palmer—"Adrenal rest" tumour of kidney.
Mr. Mollison—Carcinoma of cardiac end of stomach.
Mr. Bell Walker—Double stricture of gut, removed by operation.

Guy's Hospital Debating Society.

THE Seventy-fifth Ordinary Meeting was held in the College smoking-room, on Saturday, November 17th. Dr. Spriggs took the chair. The secretaries cannot have helped a modest feeling of satisfaction at the entire absence of private business; not even the most querulous of members could trump up a complaint against them.

Mr. R. Evans then proposed, "That this House deplores the tendency of modern systems of education towards specialism." His speech was the best that the House has enjoyed for many meetings. Mr. Kilpack opposed the motion. Messrs. Lobb and Digby seconded the proposition and opposition respectively. The Chairman then introduced the general discussion. Besides the secretaries, there also spoke Messrs. O'Callaghan, P. S. Price, Fuller, Smith and Laidlaw. The opposer and proposer then replied, and the motion was put to the House, and carried by the narrow margin of four votes. A vote of thanks to Dr. Spriggs for kindly taking the chair terminated the proceedings.

It is painful to note that some of the more illiterate members of the society confessed that they were ignorant that "specialism" was a word in the English language!

Guy's Physiological Society.

A MEETING of this society took place on Monday, November 19th, when an interesting paper was read by Mr. T. T. O'Callaghan on "Obscure Organs."

The pineal gland was dealt with at some length, evidence being produced which showed the organ had been considerably studied as far back as the time of Descartes, in 1596. Recently, however, it was suggested that efforts to discover the functions of this and other obscure organs in the human body had been neglected, while more obvious organs, such as the heart, lungs, liver and pancreas, had received rather more than their fair share of attention.

Several theories, ancient and modern, were given concerning the functions of the pituitary body. Evidence has been produced tending to show that in cases of thyroid insufficiency there is an increase in the size of the pituitary. It seems certain that the secretion of the pituitary body increases the contraction of the heart and blood-vessels, and that it regulates the nutrition of tissues, especially of bones and the nerves. Interesting experiments were recounted of work done by a considerable number of investigations on the thymus gland, The other glands and organs mentioned were the appendix, prostate, seminal vesicles, glands of Cowper, carotid body, and the ano-coccygeal body. The meeting closed with a very hearty vote of thanks to Mr. Mollison, who had come to occupy the chair at a moment's notice in the unavoidable absence of Dr. Hertz.

W. L. HIBBERT (Hon. Sec. and Treas.)

Pass List.

UNIVERSITY OF LONDON, M.B., B.S. EXAMINATION, OCTOBER, 1906.—HONOURS.—Mr. W. H. Trethowan obtained Honours in Medicine, Surgery, and Midwifery and Diseases of Women, and was bracketed for the University Medal. Mr. Arthur Pearson obtained Honours in Medicine; Mr. G. F. Stebbing obtained Honours in Surgery; Mr. E. Wragg obtained Honours in Pathology. PASS.—Messrs. T. H. Barton, A. W. Berry, J. L. Bookless, I. R. Cook, S. W. Daw, E. W. Giesen, P. F. McEvedy, C. A. L. Mayer, E. F. Reeve, A. Zorab. SUPPLEMENTARY PASS LIST.—Messrs. G. F. E. Allison (in Group I.), E. Alban (in Group II.).

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—FINAL EXAMINATION FOR THE LICENCE IN DENTAL SURGERY, NOVEMBER, 1906.—PARTS I. AND II.—*J. R. D. Ditch, *J. E. Hanna, *C. E. Lloyd, *O. J. Roots, *G. Warren, *B. L. Weaver. PART I. ONLY.—H. T. Reeve and B. B. Samuel. PART II. ONLY.—*F. W. Bartle, *R. Beadnell-Gill, *F. A. Beckley, *G. L. Davies, *F. Giles, *I. Margolies, *R. J. Oliver, *G. Packham, *A. H. Pickett, *R. R. B. Ponder, *N. V. H. Riches.

FIRST PROFESSIONAL EXAMINATION.—MECHANICAL DENTISTRY AND DENTAL MECHANICS.—*G. Hunt, *C. C. Jones, *L. A. B. King, *E. G. Robertson, *A. L. Saul.

MECHANICAL DENTISTRY ONLY.—*E. J. Archer, *F. O. Hume, *M. J. Marks, *C. R. M. Peaty.

DENTAL METALLURGY ONLY.—*W. E. Guilding, *A. M. Henry, R. Hope, *P. E. Kendall, *I. Levy.

* Denotes completion of examination.

In Lighter Vein.

DIALOGUE between two brothers Salmon (Billy and Johnny) swimming up the Fume River in Lancashire on Thursday, September 24th, 1874. Johnny got caught by a fisherman, who heard the following conversation between them:—

Johnny—Look there! I declare, there's a fly!
Billy—It's all my eye, that's no fly.
Johnny—Oh! but I knows, so here goes,
You'll see, I'll nail he!
That bluebottle goes down my throttle, as sure as my name's Johnny.
Billy—Now John, hold on. You'll get took, on a hook, I've seen those chaps before.
When I was a pink, I used to think, they looked nice,
Got humbugged once, but not twice.
When it pricked, I kicked, off I got, and off I set, like a shot, and now it's not for Joe!
Johnny—'Tis a fly.
Billy—It's a lie.
Johnny—I like a fly.
Billy—So do I, but don't you try.
Johnny—Is it a bug?
Billy—Yes, a humbug, and so you'll find; now mind, as sure as you do it you'll rue it, or may my tail never waggle again.
Johnny—Shut up, you pup, you're a duffer.
Billy—You're another, though you are my own brother.
Johnny—I've got it, but rot it, 'tis only a feather, as tough as leather, and tastes of nothing at all.
There's something wrong, too, about this string, too, I can't make it out at all. Oh! confound it, I see, 'tis a bad job for me, 'tis a hook with a feather lapped round it.
Billy—Pull, Johnny; kick, Johnny; jump, Johnny! Twist, turn and splash as fast as you can, there's a man.
Johnny—Your grandmother, hold your bother. I'll break his line in quick time. I'll pull him in neck and crop, and if he can't swim, I'll drown him; then he'll feel rather silly, won't he, Billy?
Billy—You'll find it out, no doubt, before much longer, which is the stronger. I'd rather you had got it to do than myself, though you are my own brother.
Johnny—Oh! my dear brother, tell my mother, I died game, but it's all the same. I begin to feel small, and can't kick at all. Drat that fellow, with his red and yellow dressed-up feather. Smash his rod and break his line, may his goose be cooked, as he's cooked mine; I'll have another flutter though, before I go, to be boiled in a pot or cut into steaks; if the line breaks, all the better for me, you know. Hulloa! what's the matter, something gone crack, right through my back, I'm going up hill, tail first, I declare. Good-bye, Bill. Don't I wish I'd never been a fish."

Finis.

Spleno-megallic Cirrhosis.

CLINICAL LECTURE BY Dr. HALE WHITE.

Gentlemen,—The case which we are going to take this afternoon is that of a boy who has been seen by many of you. His name was Alfred Pickles. He was admitted under me into Addison ward on the 23rd August this year and he died under my care about ten days ago. His history is this. In 1905, when ten years old, he was in the hospital under Dr. Taylor. The abstract of the old report says that he came in for hæmaturia. One day he returned from school ill, and subsequently had pneumonia. He was getting on well, when his mother noticed that his abdomen was becoming large. Soon after this he walked two miles to see some friends and had great difficulty in breathing. On admission in 1905 he was 33 inches round the abdomen. There was a thrill from fluid in the abdomen and the spleen was three inches and the liver two and a half below the costal margin. He had hæmaturia.

He steadily got better and he was discharged, the diagnosis made being spleno-megallic cirrhosis.

When he was admitted under me in August last we found that the family history and the previous illnesses were unimportant, and that he had been quite well since he left the hospital in 1905, until, a few days before admission, he noticed he was passing blood in the urine. He told us also that he had had bleeding from the nose and bleeding from the gums. The hæmaturia soon ceased, and then he seemed quite well. He used to run about the ward, and many of you who did not see him in the ward probably knew him because he was the son of a woman who worked in the hospital, and he could often have been seen running about the grounds before admission. He was a very healthy looking boy, always in good spirits. There was no obvious pigmentation, he was not stunted in growth, and his fingers were not clubbed. The thoracic viscera seemed healthy. On examining the abdomen, we found that the liver only came to an inch and a half below the costal margin. The spleen, on the other hand, was enormously enlarged, pointing downwards to the right. There was no evidence of congenital syphilis. He was not jaundiced. The urine contained blood cells, a few casts, and, of course, albumen. The blood count showed that he had a colour index of 0·9, 4,850,000 red and 4,200 white cells. At first he was sick several times, and it is important to remember that when he was sick he brought up blood. Gradually the sickness passed off. Gradually, too, the blood in the urine got less. He soon was able to be up and about the ward. All he complained of was that he had pain in the abdomen, which was not surprising considering the distension from the enormous spleen. But further, there was some fluid in the abdomen, and that helped the distension. He gradually got better, and finally he went out of the hospital on October 2nd.

On the evening of the 21st October he was re-admitted into Clinical. He had been quite well a few hours before, and had been seen running about the grounds. But when he was admitted he was quite collapsed. The abdomen was still large. He complained of pain there. He had hardly any pulse. I saw him about an hour after admission, and he was so collapsed that I wondered whether he had some internal hæmorrhage. In spite of all that we could do, the collapse did not pass off, and he died a few hours later.

Now, here are his viscera. I will pass them round for you to see. But before I do that, I will point out to you the interesting features about them. Taking the spleen, which many of you felt during life, you see what an enormous organ it is, and you can see that it has had several medium-sized hæmorrhages in it; it is hypertrophied in the sense that the enlargement is not local in any place. It is a spleen a great many times bigger than it should be. I have the weight of the viscera here. The weight of the spleen is 1,150 grammes. That is nearly 2 pounds 9 ounces—a wonderful spleen for such a boy, a boy of only eleven. Then, here is the extraordinary liver. You see the liver is now small. It weighs 750 grammes, that is 1 pound 10 ounces. I will pass it round, so that you can see it for yourselves, because it is a very rare and interesting specimen. You will notice, if you will look at the cut surface, a number of bands of fibrous tissue running through the organ, and in between these bands a quantity of lighter tissue, looking very much as though some new growth had been let into the liver. The surface, on the other hand, looks like an alcoholic hobnailed liver, but there is an unusually large nodule about the size of an acorn at the top of the liver. Some of us gave a guarded opinion as to what was the pathological condition of the organ, but it turned out to be an example of interlobular cirrhosis of the liver. In a moment I will tell you why it has this

peculiar appearance like pieces of new growth let into the liver.

The kidneys showed nothing of importance. There was a little tubal change, perhaps, but nothing more than might have been expected from a person who had considerable hæmaturia.

Then the large intestine was in a curious condition. Here it is, and I will put uppermost the lower part of the large intestine, and you will see the extraordinary sodden œdematous appearance of its mucous membrane.

Now we come to the histology. You can come and see the organs under the microscopes on this table. The spleen shows a considerable increase of fibrous tissue, and here and there there are groups of large epithelial-like cells with large prominent nuclei.

The liver is most interesting. You will also see that under the microscope. You will notice that those dark bands cutting through it, which you saw with the naked eye, are great bands of fibrous tissue, and the light part, which to the naked eye looked like new growth, consists of lobules of liver cells, which, as seen by the microscope, hardly appear altered. Why they should be so light is perhaps difficult to say, but the liver is a very good instance of an interlobular cirrhosis. The lobules are marked out by the bands of fibrous tissue with extraordinary distinctness. The fibrous tissue hardly extends into the lobules themselves.

With regard to the large intestine, there is considerable atrophy of the glands and a good deal of small cell infiltration in the mucous membrane. The section also shows that that sodden look that the intestine has was entirely due to the œdema of it.

Now, we have learned enough about the case, I think, to be in a position to discuss it. Every one of us was agreed that during life and at the post-mortem the most striking feature of the case was the gigantic size of the spleen. You will remember that the weight was 1,150 grammes; so that now I propose to consider with you what might possibly have been the cause of a spleen of that size. The spleen is such a variable organ that when we call a spleen a large spleen we had better only consider the cases of spleens weighing over 20 ounces; that is about 600 grammes

One very important cause of such a condition is malaria. We must never forget malaria as a cause of a large spleen. On the whole, I suppose it is the most common. I want to put these causes in a somewhat practical order for you. Then, I should certainly say that in London, at any rate, the next thing that you have to bear in mind when you are considering large spleens is whether or not the cause of the large spleen can have been alcoholic cirrhosis. Then you have to consider whether it can be some form of infection. It will surprise you perhaps to have that put so high on the list. Malignant endocarditis causes very large spleen because not only is there the fact that it is an infective fever—and infective fevers make large spleens—but also infarcts occur in the spleen in malignant endocarditis, and they add to the size, too. And other infections that particularly cause large spleens are typhoid fever and pyæmia; and among rarer causes in this country are typhus and Malta fever.

Then, again, I think you will be surprised to hear that a common cause of large spleen as seen in London is tubercle, quite apart from lardaceous disease. That does not arrest the attention much, but our records say that people dying of phthisis frequently have large spleens. Then the next cause in practical order that I have put down here is heart disease, and that, too, gives rise to considerable enlargement of the spleen. That is not surprising, because of course there is backward pressure which acts through the portal system, and causes enlargement of the spleen quite apart from malignant endocarditis, although you must remember that often cases which clinically are not regarded as malignant endocarditis are shown bacteriologically to be examples of this disease. I think you will find that we have now mentioned all the common causes of enlargement of the spleen.

You will remember that only a couple of years ago Dr. Frederick Taylor dealt with this subject in the Lumleian lectures which he gave at the Royal College of Physicians. He analysed our post-mortem records, so that we can readily see if what I have told you is true. He says, Taking spleens of above 30 ounces in weight, the largest occurs in a case of cirrhosis and weighed 87½ ounces. The next two weighed 80 ounces and 79 ounces in malaria. Another malarial spleen was 63 ounces. In infective endocarditis spleens weighed 43, 34 and 30 ounces. Two spleens in typhoid fever weighed 31 and 32 ounces. One large spleen weighing 72 ounces was associated with acute prostatitis, which is an infection. Among spleens weighing 20 to 30 ounces, cirrhosis again stands at the head of Dr. Taylor's list of cases from Guy's Hospital. But malaria is so common that if you take all the world over it probably is the commonest cause of enlargement of those spleens weighing between 20 and 30 ounces. Ten spleens from

cirrhosis of the liver weighed between 20 and 30 ounces, infective endocarditis has five, typhoid fever two, phthisis, apart from lardaceous disease, three, and heart disease one.

So I think that Dr. Taylor's figures show you that our post-mortem records here bear out what I told you as to the common causes of considerable enlargement of the spleen.

We will now discuss the rarer causes of splenic enlargement, and I do not think that you can put these in any particular order of frequency, because they are so rare. We have had five common causes of great splenic enlargement, and, passing to the rarer causes, I have jotted down here for number six, lardaceous disease. Fortunately, that now-a-days is exceptional. Next remember spleno-medullary leukæmia. Then, I have put down congenital syphilis, but in that, of course, you will not get a spleen over 20 ounces, because of the age of the patient. Then there is the condition called Hanot's cirrhosis; then, next we will write down splenic anæmia. Then there is the disease spleno-megallic cirrhosis, often called Banti's disease. Then another one that can be put down here among the rarer causes of splenic enlargement is a condition of splenomegally with chronic cyanosis and polycythæmia; and then there is lymphatic leuchæmia (the spleen here is less large than in some other conditions we have named). Next we will write down a children's disease with a terrible name—anæmia pseudoleukæmia; then Hodgkin's disease (the spleen here is less large than in some other conditions mentioned); finally, that very rare condition, bronzed diabetes.

You may say that to have written this list on the black board is very "booky," and I plead guilty to some extent, but our case to-day is so rare that we must consider the rare conditions. I think that those are all the conditions in which you will find very large spleens, over 20 ounces, and in cases of children, of course, we allow for the age.

Now, let us go through these, and see if our case could have been any of them. It will not take many minutes, you will find, to do that.

Our case was obviously not malaria. The boy had not been out of England.

Next, with regard to cirrhosis. I want you to bear in mind that although alcoholic cirrhosis of the liver is very frequent in adults, it is very rare in children, and while there are several cases of cirrhosis of the liver in children recorded in the Pathological Society's Transactions, some of which had a big spleen, yet many of them, judged by our knowledge of to-day, were probably examples of some other disease than alcoholic cirrhosis, although in some certainly the disease was alcoholic. I call to mind a boy in the Clinical years ago who had cirrhosis of the liver. He was only eleven years old, and he was a confirmed drunkard. Dr. Taylor mentions another boy who was thought to be going to become a very interesting case of large spleen and cirrhosis. One day his father was seen to bring brandy to him in the hospital. The father was spoken to here on the subject, and he confessed that the boy was in the habit of taking considerable quantities of brandy; so that you must, if you please, always be suspicious that when a case of cirrhosis of the liver looks as if it was some exceptional disease, it is really an example case of alcoholic cirrhosis.

Going down the list, I do not think that you will be likely to make much mistake about typhoid, or pyæmia, or typhus, or Malta fever. They are such obvious causes of splenic enlargement.

But mistakes are frequently made about malignant endocarditis. Four or five years ago there was a boy under me about whom many of the senior men were very much interested. Several thought that a diagnosis of Banti's disease should be made, because of the very big spleen and big liver. Happily I refused to acquiesce. One day somebody heard a faint murmur. A few days later the murmur was obvious; and a few days later it became musical. To make a long story short, the boy died of malignant endocarditis, and that was the cause of his big spleen. There are few diseases that are more frequently overlooked than malignant endocarditis. You must be careful to look out for it. Our present patient had not malignant endocarditis. His heart was healthy during life, and at the post-mortem he certainly had not got disease of it.

He certainly had not got tubercle or lardaceous disease, and the examination of his blood showed he had not got spleno-medullary leukæmia.

I have been asked two or three times whether the condition of his liver and spleen could be possibly due to congenital syphilis. One's answer to that is that there is no evidence. His teeth were not syphilitic; he had no scars about the angle of the mouth and he had no evidence of congenital syphilis. I do not think that this is like the liver of a child with congenital syphilis. I have seen several, but I have never seen one like it. In the cases I have seen of this age, the liver instead of being more or less hobnailed, was cut into

much bigger areas, and gummatous change has been present at the same time. I am not referring to cirrhosis of the liver which is found in the new-born. Children with a universal cirrhosis of the liver die soon after they are born. In the congenital syphilis of the liver that I have seen at the age of twelve or thirteen the liver has been exactly like the liver of acquired syphilis.

Now Hanot's cirrhosis. This is a form of cirrhosis of the liver of which we do not know the cause, which occurs in young subjects, and in which the liver is very large and the patient suffers from chronic jaundice. The spleen is large, hæmorrhages are common, there is a leucocytosis, the cirrhosis is biliary, which it certainly is not in our patient. He had not got jaundice and had no leucocytosis.

Let us continue to look at our list. There is the disease described under the name of splenomegally with chronic cyanosis and polycythæmia. In such a case the sufferer is found to have a big spleen and also to have very thick blood. I have never seen a case myself. It is a very rare condition indeed. It is described by Osler in the American Journal of Medical Sciences for August, 1903. The sufferers have always considerable cyanosis and they have a very large number of red cells. I find a count of twelve million reds recorded. The blood was quite thick and the spleen was large and there was pigmentation of the skin. Our boy certainly had not this disease, and he obviously had not got lymphatic leukæmia, for his blood did not show any excess of leucocytes, and he evidently had not got Hodgkin's disease.

Next, there is that rare condition known as bronzed diabetes, which appears commoner in France than in England. I have been on the look-out for years for an example of it, but I have never found one. There is a great deposition of iron in the organs and in the skin. The skin becomes pigmented, there is cirrhosis of the liver and moderate enlargement of the spleen, and the striking feature about the disease is the presence of glycosuria. Obviously our boy was not an example of this.

All we have left undiscussed on our list are splenic anæmia and splenomegallic cirrhosis, or Banti's disease. Splenic anæmia has been described, especially by Professor Osler, and I think it will be best to go through his article on the subject and see how far our boy corresponded to his description. I have here his original pamphlet. The disease is defined in it thus:—

"A chronic affection, probably an intoxication of unknown origin, characterised by a progressive enlargement of the spleen which cannot be correlated to any known cause as malaria, leukæmia, cirrhosis of the liver, etc. (primary splenomegaly); anæmia of a secondary or chlorotic type, leukopenia, a marked tendency to hæmorrhage, particularly from the stomach; and in many cases a terminal stage, with cirrhosis of the liver, jaundice and ascites (Banti's disease)."

Clearly it is a fair subject for a clinical lecture to see whether our case accords with that description. You will notice that splenomegallic cirrhosis, or Banti's disease, is regarded as the terminal stage of splenic anæmia.

Authors agree that cases of splenic anæmia are much commoner in males than in females; our patient was a boy. We know nothing of the cause of it. I do not know that such a negative point can help a diagnosis, but certainly we do not know the cause of the trouble in our boy. There are a few recorded instances of several cases in one family, and Dr. Taylor, you may remember, has recorded in his lectures a remarkable instance of the trouble running in a family, for a brother and a sister, both suffering from splenic anæmia, died in Guy's Hospital under his care.

A point that Professor Osler makes is that splenic anæmia is long lasting. Many cases have gone on for years. I see here twelve years, twenty-five years, twenty-five years; and he says, "In my series of fifteen cases, in seven the duration of the disease was more than ten years, and in eleven more than four years. That is a very strong point for anyone who proposes to argue that our patient had not that splenic anæmia. We cannot trace his history earlier than two years ago. The only thing to be said against anyone who used that argument is that the boy died unexpectedly suddenly. If it had not been for that sudden unexplained collapse, he might have lived longer; and we are quite ignorant of his previous history. It may have been that the spleen was enlarged for many years before he came to the Hospital in 1905. At that time certainly he had got a very large spleen, so that he must have had the disease some time. Professor Osler draws attention to the fact that the spleen in chronic splenic anæmia is of a size which is unequalled in any other disease except, perhaps, spleno-medullary leukæmia; and one would possibly add malaria to that. But, at any rate, it is very large indeed in splenic anæmia, and you can see that in our patient it was very large.

Then Professor Osler next calls attention to the fact of hæmatemesis. This is a remarkable feature of the disease. Eight of his cases vomited blood. In nineteen cases, collected by the American Association of Physicians, seven vomited blood; and this point is made by those who have described the disease, that the vomiting of blood occurs before the change in the liver. The sequence of events in the cases which have been watched is, first of all, the spleen enlarges, then, much later in the disease, the liver becomes affected. The hæmatemesis is believed not to be due to the cirrhosis of the liver, because it occurs before cirrhosis is detected, and, indeed, when operation has shown the liver to be healthy. These patients bleed from other parts, and you will remember that our boy bled from many other parts—he bled into his urinary tract and from the gums. Professor Osler goes on to say that he thinks that, with the exception of the chronic form of gastric ulcer, there is no condition in which hæmatemesis may occur for so many years as in splenic anæmia. I need hardly say that, after the lecture I gave last month, I, for one, should not agree with that, for in gastrostaxis you may have hæmatemisis for many years. But, at any rate, our boy accorded with the description in the pamphlet in that he brought up blood, passed it in his urine, and bled from the gums.

But now, to turn to the blood. In splenic anæmia there is nothing peculiar or distinctive about the blood as there is with so many other diseases that we have been discussing. There is not the great increase of white cells that there is in splenomedullary leukæmia, and there is not the increase in the lymphocytes that there is in lymphatic leukæmia. In Professor Osler's analysis of his cases, the average number of the red cells in fifteen was 3,425,000. The highest count was 5,200,000, the lowest 2,187,000. Now, you will remember that in our case the red cells were 4,850,000. There is usually a somewhat low amount of hæmoglobin. The average in Professor Osler's thirteen cases was 47 per cent., and you will remember that the colour index in our case was 0·9, so that the hæmoglobin was not much diminished. In many cases there is a considerable diminution in the white cells. Professor Osler found that in fourteen cases the average was 4,520. You will remember that with our boy they were 4,200. We may sum up by saying that the anæmia is shown by some diminution in the number of red cells, a considerable diminution of white, and a diminution of hæmoglobin greater than that of the reds. Our case fits in fairly with this.

Sometimes the skin is pigmented. That was not so in our case.

Hepatic cirrhosis, which our patient certainly had, is a striking late feature of the disease. We were able by the enlargement and feel of the liver to diagnose it during life.

Our case had ascites, and so had four of Professor Osler's cases. In his cases only two had jaundice, and ours had not; so that you see, going through the original article, I think we must conclude that, in many respects, our case is a case of splenic anæmia, which, as is shown by the state of the liver, had passed on to, and had become one of splenomegallic cirrhosis, or Banti's disease.

With regard to the histology of the disease, the chief change in the spleen is fibrosis, beautifully shown in the specimens under the microscope. In addition there is a considerable endothelial proliferation of the lining of the blood sinuses, and probably those large cells you see represent this. After a time the fibrosis affects the liver too, and the liver itself becomes cirrhotic, so that the case becomes one of spleno-megallic cirrhosis, often called Banti's disease, after Banti, who first described this terminal stage of it. I think the sections you see support the view that our case is one of the terminal stage of splenic anæmia (Banti's disease). The objections I have already admitted. The strongest is that our history is not long enough for us to know whether there was a stage before this cirrhosis in which the spleen only was enlarged, for you will remember that, when the boy was in the hospital in 1905, his liver was then already enlarged.

I am quite sure that the most important practical point to tell you about the disease is to be very careful how you diagnose it. I have often been asked at the bedside to agree that a patient has splenic ænemia or that he has Banti's disease, but personally I have never had under my care any other case in which I thought the diagnosis justified, and even here the lack of history throws some doubt on it. Remember the case I alluded to of malignant endocarditis, which some thought to be Banti's disease.

Many cases of supposed Banti's disease turn out to be ordinary cirrhosis of the liver; it is a disease which you have to be very careful about diagnosing, because so many other conditions

will give you an enlarged spleen, or a somewhat enlarged liver and a big spleen, too. Always think very hard before you come to the conclusion that the case is one of splenic anæmia or of Banti's disease.

Before concluding, I should like to go back to what I told you, namely, that at the post-mortem it looked very much as if some new growth had been let into the liver. You see the liver cells under the microscope may look very like cancer cells, and bands of fibrous tissue due to the cirrhosis may shut off groups of cells, and sometimes, as in our case, these groups of cells get altered in colour so that it looks as though the liver may be invaded by new growth, especially when, as in our case, the constriction of the fibrous tissue leads to a nodule of liver tissue the size of an acorn and altered in colour jutting out from the rest of the liver. To show you that that is a real difficulty, I thought I would conclude by bringing you down notes of another Guy's case. It was shown at the Pathological Society, twenty years ago, by Dr. Goodhart. This was a case of a woman aged sixty. She was under Dr. Pye-Smith. At the post-mortem the liver only weighed 32 ounces, and was a good specimen of the external appearance of a hobnailed liver, but on section the left lobe was converted into what appeared to be masses of various sizes of soft new growth. Dr. Goodhart says that the macroscopic appearances were so pronounced that he was quite incredulous of their being explained by cirrhosis, but he goes on to say that a microscopical examination showed that the case was one of cirrhosis, and that the masses of cancerous appearance are huge islands of liver cells strangled by the surrounding cirrhotic material.

I have said nothing about the treatment of splenic anæmia, partly for want of time and partly because we know little about it. Several cases have been recorded in which the patient is said to have become better by having the spleen taken out. In this week's *British Medical Journal*, Armstrong states that he has collected thirty-two cases in which the spleen was removed; the mortality was 28 per cent. You will remember we have learnt that the disease may last for many years, even twenty. Therefore, as many of the cases of removal of the spleen are comparatively recent, it is clear that we do not know if life is prolonged by this operation, and even if it is, we must remember that the operation has a high mortality. It is only fair to add that individual patients are reported to have benefited.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Guy's and Politics.

SIR,—You have indeed sketched out a dazzling political programme for a possible future representative of Guy's in Parliament. But it needs a little amplification.

The party system of politics, whatever its value—to my mind very great—is about to be discussed by the Debating Society, and is, at any rate, the system under which we are governed. In order to be effective, a Member of our Parliament must be a strong and loyal, if an unbigoted, partisan. Largely as a result of the Unionist compact in 1886, the need of progress is recognised in the Unionist as well as in the Radical ranks. In this country an election is a general referendum deciding in each constituency for progress on Conservative or Radical lines. The Member primarily owes his services to his party.

You, sir, rightly assume an impartial tone, lest you should alienate the sympathies of the few Radical sheep in your fold. But even apart from the few subjects at issue between the parties, the field of work is wide. Most of the work of Parliament is done in committee, and is non-partisan. To further the interests of hospitals, and especially the enthusiasm and facilities for scientific research, to aim at the prevention of disease by general education rather than by coercion, to support good traditions, culture and religion, while fighting always for the cause of scientific reasoning, and for effectual co-operation on business lines in the light of experience limited neither by race, space or time—these will, at least, lay the foundations of a policy worthy to represent the medical profession in the imperial councils.

I hope as many Guy's men as possible will accompany you, sir, to my opening meeting at the Rotherhithe Town Hall, on Wednesday, December 12th, at 8 p.m., and shall hope in time to convince even the few dissentients in Guy's that the true scientific policy is that of the Unionist party.—Yours, very truly,

FRANCIS FREMANTLE.

Guy's Hospital,
London, S.E.
Nov. 25th, 1906.

A Guy's Song.

SIR,—Your advocacy of that oft-mooted subject, a Guy's song, is most welcome. It is, as you say, quite time that our hospital possessed one; and many of us have felt the lack of it as a fitting termination to the entertainments that occasionally help to enliven our sojourn here. At schools and colleges it usually forms the finale to all the concerts, and the wish has often been expressed that we had one for the Musical Society's concerts, and for those pleasant "Smokers" that seem unhappily to be dying out now.

Would it not be possible to obtain at least a tentative one for the Christmas festivities? No one would wish, of course, for a hurried compilation—for the song should be worthy of Guy's Hospital and its great traditions—but Christmas would be a suitable time to introduce it.

And it is not as though there was no literary, or even musical, talent in our midst. May I suggest that we have both combined in at least one of our Staff?

Our ideal should be a Guy's song, in honour of Guy's foundation, and by a member of Guy's, and I sincerely hope that you will not now let the matter drop until at least a strenuous effort has been made to secure that ideal.—I am, yours sincerely, F. A. BARKER.

Guy's Hospital, November 28th, 1906.

Miniature Rifle Range.

Dear Sir,—I regret that I was unable to fulfil my promise to let you have a full account of estimated cost, etc., of above for publication four weeks ago, the delay being due to indisposition, and also to unforeseen difficulties which arose.

As you have heard already, the scheme was submitted to the Council of the Clubs' Union for approval. A discussion on the subject followed, chiefly centred on the noise. The dissecting-room staff objected to firing taking place between the hours of 9 a.m. and 5 p.m. Eventually a sub-committee, consisting of Mr. Stewart and Mr. Minett, was appointed to hear the firing and to judge of its effect.

A number of rounds have been fired in the presence of the sub-committee, and also of the Superintendent, who stationed themselves in Addison with a view to finding out whether the patients would be disturbed. All that now remains is for the sub-committee to make their report, and for the Council of the Clubs' Union to send in a recommendation of the scheme to the Superintendent, who will lay it before the House Committee, and to the Dean of the Medical School. There are two stipulations which have been made:—

1. Should the noise ever resolve itself into a nuisance from the patients' point of view, the range will have to close.

2. During session, shooting shall take place between the hours of 5 p.m. and 7 p.m. *only*.

I enclose estimated cost, and also rough draft of proposed rules, and remain, etc.,

29th November, 1906. HAL J. HENDERSON.

Estimated Cost of Range.

(Submitted by Mr. Saltmarsh).

Erection of iron door at end of passage; fitting up electric light and shields for bulbs; platform for firing point, and mat to cover same; wires for drawing up targets; would cost about £9. Two War Office pattern ·22 rifles at 45s., £4 10s.

Preliminary Draft of Rules.

1. The Committee of the Rifle Association shall have power to regulate the shooting, and, should the necessity arise, owing to any crowding, to draw up a time-table or other device.

2. There will be two rifles for use of members, but members possessing their own miniature rifles will be allowed to use them, provided they are approved by the Committee.

3. A charge will be made for targets, and also for ammunition, the profits on which will be utilised for the cost of lighting.

4. Members guilty of carelessness or negligence, which may in any way endanger others, may be suspended from using the range at the discretion of the Committee.

5. The range will be open from 5 p.m. till 7 p.m. during the session; no member shall fire more than seven rounds when others are waiting to shoot.

A Note for the Externs!

Dear Sir,—As some of the Externs (especially novices) frequently experience trouble in their cases, perhaps they might like to try the enclosed simple remedy; hence I send it to your journal.—Believe me, yours very truly,

13, Old Steine, Brighton, JAMES F. RYMER.

November 27th, 1906.

Extract from a Memoir of M. le Paye du Pratz, who resided seventeen years in Louisiana, taken from the Gentleman's Magazine of A.D. 1753: the following was presumably written ten years previous to this date—

To procure an eaſy Delivery to Women with Child.

"Take laurel-leaves dried, not too old, but gathered within the year: pulverize them well, taking care that no dirt, or heterogeneous matter, be mixed with them. Take one or two ſpoonfulls of this powder, and mix it with as much olive oil as is neceſſary to make it into a liquid paſte of ſuch a conſiſtence as not to run abroad. Spread this compoſition upon a linen-cloth, and apply it to the navel of the woman in labour. As ſoon as this is done, in whatever unnatural or irregular poſition the child may be, it will immediately turn and preſent itſelf readily, and in the beſt and moſt happy manner. If olive oil cannot be had, Hungary water may be made uſe of to moiſten the powder, but oil is preferable.

"The virtues of this ſimple topical remedy have been often experienced. One woman in particular, who had been four days and a half in labour, was by means thereof delivered within an hour, and two others, one of whom had been two, and the other eight days in labour, were alſo, upon application thereof, immediately and happily delivered. Hard labours are attended with ſuch cruel pains, and of ſuch long continuance, that ſuch a ſimple and effectual remedy ought to be eſteemed as a moſt valuable preſent to the publick. It would be advifeable to make uſe of this application in all caſes as ſoon as the woman falls in labour. The berries of the laurel have the ſame virtues as the leaves, and may be uſed inſtead of them. In countries where the laurel is common, experience hath taught the ſhepherds the virtues of it, for when the ſheep are on the point o bringing forth, they cauſe them to ſwallow 7 or 8 laurel or bay berries ſtripp'd of the ſkin."

Aspects of German Medicine

(Concluded).

By Arthur F. Hertz, M.A., M.B., M.R.C.P.,
Radcliffe Travelling Fellow.

IV.—Treatment.

In Germany non-medicinal methods of treatment receive on the whole a good deal more attention than in England. In each of the best clinics there is a hydrotherapeutic department, and in most of the universities there is a special course of lectures with practical instruction on the subject. I doubt whether it is possible for the richest patients in England to obtain such scientifically applied hydrotherapeutic treatment as that which is available for the poor patients of Berlin in the magnificent institute recently opened under the direction of Professor Brieger. Probably the importance of hydrotherapeutics is sometimes exaggerated, but there is no doubt that its value is far greater than its almost complete neglect in English hospitals would suggest. In hospital hydrotherapeutic institutes excellent results are obtained with out-patients in treating sciatica, chronic joint diseases, muscular rheumatism and many other conditions, which so often derive none but the most temporary benefit from the drug treatment, which is usually all that it is possible to provide in English out-patient departments.

Baths are much used in the treatment of nervous diseases, especially with the object of diminishing spasticity or of assisting the active movements of limbs at a stage in which they have sufficiently recovered to be able to move when supported by water, though still quite powerless in the air.

Typhoid fever is universally treated by cold baths, though it is generally agreed that their influence on the temperature is of small importance compared with their stimulating action on the nervous and respiratory systems, the latter causing the patient to breathe deeply, with the result that the incidence of bronchitis and other pulmonary complications is much diminished.

Continuous baths are not infrequently used. I saw one patient who had been in a bath without intermission for four weeks; he had myelitis complicated by bed-sores, which had almost healed by this treatment, though no measures hitherto had produced any improvement, owing to the difficulty in keeping them clean caused by incontinence of fæces and urine. Many surgical and dermatological clinics have special arrangements for giving continuous baths for bad burns and severe cases of various skin diseases. Patients do not find the long-continued baths at all unpleasant, as the water is kept as constantly as possible at the body temperature. In the modern asylums all cases of mania are kept continuously in baths until they become soothed and sleepy.*

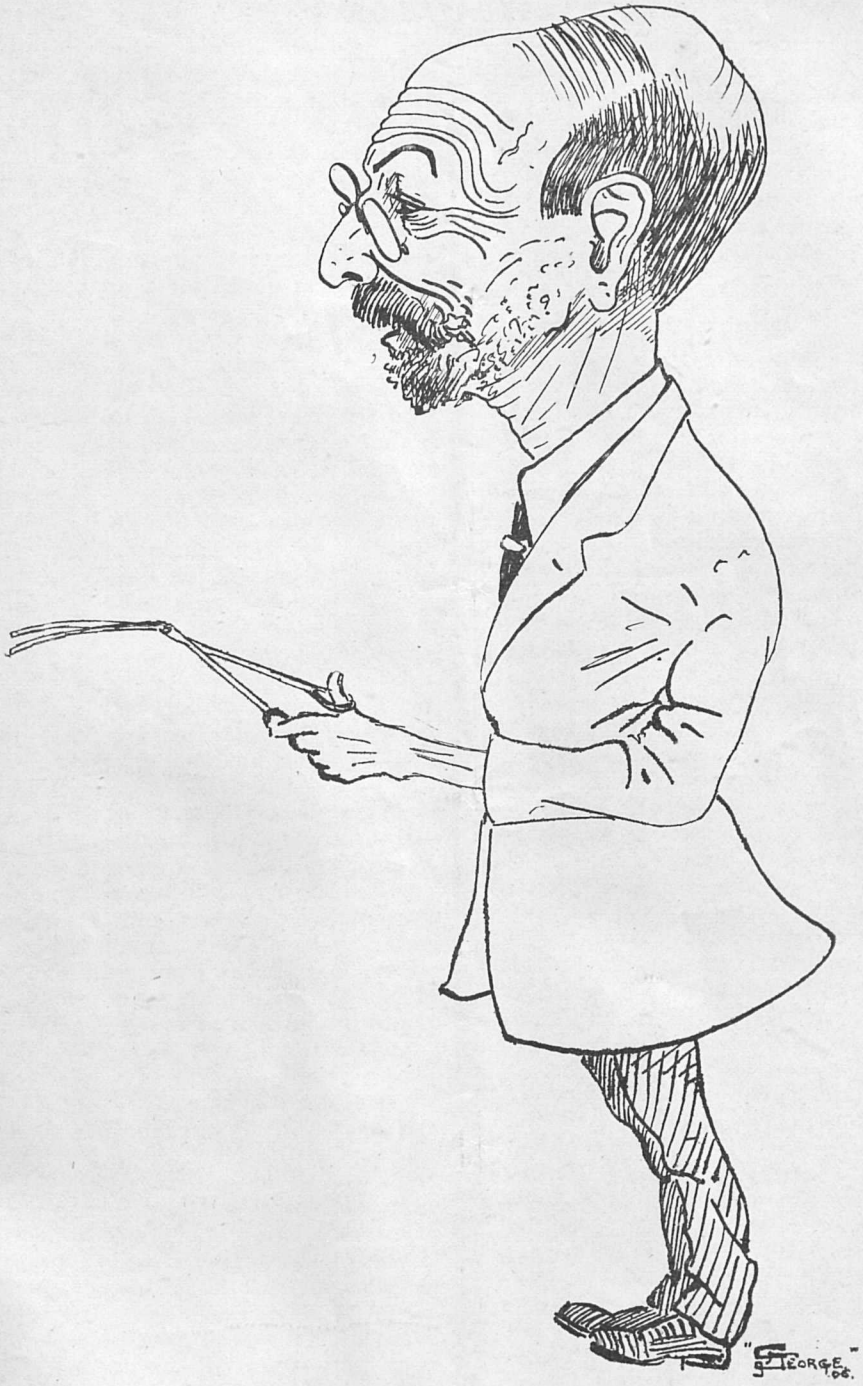
I fancy that many of the simple hydrotherapeutic measures, such as ordinary hot or cold "complete" and "half" baths, which are so highly valued in Germany, but in England would often hardly be considered to be treatment at all, owe their efficacy to the fact that a bath is a comparatively unusual experience for the majority of German patients, rich as well as poor. This was impressed upon me when I heard a certain learned professor tell a large class of medical students how one can best dry one's back, a piece of information which was duly written down in the students' note-books.

Curiously enough air and sun-baths are often included under the term hydrotherapeutics. The former means nothing more than open-air treatment, but to take a sun-bath a patient divests himself of all his clothes and lies—generally on the roof—exposed to the sun with his head under an umbrella. I cannot say that I was greatly impressed with the benefits which are supposed to arise from this procedure.

Many of the best equipped clinics have a department for mechanical therapeutics. This is provided with apparatus driven by electricity for every conceivable variety of passive movements and with other apparatus for active movements, which can be accurately graduated in strength to suit the special requirements of each case. In the same department there are generally tracks marked on the floor and various appliances for teaching tabetics to regain their power of co-ordinated movement. I have seen bed-ridden tabetics learn after a course of such treatment to walk without assistance in as straight a line as a normal man. Though mechanico-therapeutics is sometimes used in England, it is rarely under efficient and scientific control and the cost is generally excessive.

In a private nursing home which I visited near Munich in addition to excellent hydrotherapeutic and mechanico-therapeutic departments there was a room, over the door of which was inscribed "Beschäftigungstherapie"—occupation-therapeutics. This was a place where patients who had become neurasthenic from having too little to do were given carpentry, book-binding and other trades to learn in order to occupy their minds.

* Dr. Hyslop tells me that this treatment is now used at Bethlem, but as it has to be reported under the heading of "restraint," it is less used than it deserves.



"Ain't sharp?"

Though there are probably more food faddists in Germany than anywhere in the world, there is generally less limitation of diet in the German than in the English hospitals. It is exceedingly difficult to persuade a German to take a milk diet for a single day, and it is rare to meet one too ill to enjoy a slice of ham and a mug of beer. Perhaps it is owing to this that a milk diet is comparatively rarely given in Germany. Professor Kraus of Berlin recommends a generous diet with wine and plenty of meat in acute rheumatism. Professor Müller of Munich gives a full diet to typhoid fever patients, with the result, he believes, that convalescence is more rapid and the frequency is much diminished of the numerous complications and sequelæ, such as thrombosis, laryngitis and periostitis, which are probably largely dependent upon the enfeebled condition, caused primarily by four weeks of illness, but greatly accentuated by four weeks of starvation. The death-rate appears to be unaffected, and hæmorrhage and perforation are no more frequent than with a milk diet. Professor Müller points out that the consistency of the contents of the lower end of the ileum and the beginning of the colon, where typhoid ulcers are most numerous, is little influenced by the nature of the diet.

Professor Senator has obtained excellent results by giving patients with gastric ulcer a diet containing cream and gelatin, even immediately after hæmorrhage, instead of the ordinary starvation régime. This is certainly theoretically sound, as such food is not in the least irritating, and cream actually inhibits the flow of gastric juice. Lastly, the value of a generous diet in renal and cardiac diseases, so long as the supply of salt is strictly limited, is gradually becoming recognised.

There are some remarkable differences in the drugs given in England and Germany. When a patient is very ill in England, he receives strychnine injections; when he is very ill in Germany, he receives camphor injections. The English use of strychnine is quite unknown in Germany, the alkaloid being only given in the form of nux vomica as a stomachic. Pharmacological experiments show that strychnine is not a cardiac stimulant, so that it may well be asked whether its frequent use in England is really justified by the results obtained. It certainly seems very doubtful whether the five minims of liquor strychninæ which are injected almost as a matter of course into every dying patient can be of the smallest value. Whether camphor is any more useful I cannot say, but its pharmacological properties would suggest that it is, and its popularity in Germany would make it seem worth while to investigate the comparative value of camphor and strychnine as stimulants.

I do not mean to suggest that because strychnine is not used in Germany it is therefore worthless. Otherwise I should be led to suggest that amyl nitrite is useless for angina pectoris, for it is a remarkable fact that this invaluable drug is rarely used in Germany, the routine treatment of anginal attacks being by means of morphia injections.

Germany is a great country for new drugs. The numerous synthetic compounds which are continually being introduced by pharmacologists and by the scientific chemists of the great drug manufacturers receive a thorough trial in numerous German clinics. It is there that the few of value are separated from the many of no value, and consequently the former are frequently in constant use in Germany for years before their importance is recognised in England. For example, theocin, which, if properly given, is a most efficient aid to digitalis in many cases of heart disease and is very widely employed in Germany, is still comparatively unknown in this country.

A preparation of a different kind which has recently become deservedly popular in Germany is digalen. This differs from all of the older preparations of the digitalis alkaloids, such as digitoxin and digitalin, in the constancy of its composition and therefore of its action, and in the absence of gastric symptoms after its administration. It can be given subcutaneously without producing any irritation, and in urgent cases of acute cardiac dilatation and in cardiac asthma intravenous injection is frequently followed in a few seconds by marked improvement, accompanied by a rise in blood-pressure, which lasts for twenty-four hours. No ill-effects have yet been observed to follow these methods of giving the drug.

Adolph Schmidt of Dresden has recently introduced a method of treating chronic constipation which has proved very successful in numerous cases. He believes that a large proportion of constipated patients owe their troubles to the fact that too little waste matter is left over after digestion of their food. He therefore gives them agar-agar, which swells up in water, and, being completely unabsorbed, adds considerably to the bulk of the fæces. All drugs which relieve constipation by stimulating either peristalsis or increased secretion of fluid into the intestines, if used for long periods, probably produce more or less permanent injury to the mucous membrane. But agar-agar being

quite unirritating, relieves constipation without producing any ill-effects, however long its use is continued. It is now sold under the name of regulin, a preparation which also contains a very little cascara to act as an intestinal stimulant, although the amount used is very much less than the smallest quantity which would have any effect if given alone. It is quite tasteless, and is best taken mixed with potatoes or other food.

Operations are never performed in the medical wards in German hospitals, so that when medical patients, however desparately ill they may be, are attacked by surgical complications, they must be moved to the surgical clinic, which is frequently in a different building and often a considerable distance away. Hence the acute abdominal cases which are generally taken into Clinical at Guy's, as well as almost all cases of appendicitis, are admitted directly into the surgical wards, where they undergo an operation without previous consultation between the surgeon and a physician.

Medical treatment of exophthalmic goitre is notoriously unsatisfactory. Though much was expected from the use of antithyroid sera, most of the results so far published both in Germany and in England are disappointing. In England therefore little is done which materially affects the natural course of the disease. In Germany, however, physicians are gradually coming to the conclusion that cases which have not very materially improved after rest in bed for two or three weeks should be handed over to the surgeons for treatment. I have heard it said in London that an operation for exophthalmic goitre is unjustifiable, as the danger of an immediate fatal issue is so great. But the danger can be reduced to a minimum by the use of a local instead of a general anæsthetic, and by performing the operation in severe cases in a number of stages. Thus one thyroid artery may be first ligatured; a week later the second on the same side is ligatured. The diminished blood-supply to the thyroid may so far reduce the activity of the gland that no further operation is required, but as a rule at a later date the half of the thyroid on the same side has to be removed. Owing to the comparatively inactive state of the gland after ligature of the vessels there is less chance of acute thyroid intoxication due to escape of the internal secretion during the operation than if the whole operation had been done at one sitting. Occasionally it is necessary to ligature an artery on the other side, and perhaps to remove part of the remaining gland. If such precautions are taken the danger in mild cases is negligible, and in all but the most severe—especially those in which structural alteration of the cardiac muscle has occurred—it is very slight. With experienced operators the mortality is about five per cent., the deaths being confined to the most advanced cases with dangerous cardiac symptoms. Favourable results follow the operation almost invariably; 75 per cent. of the patients are cured.

In two remarkable cases of exophthalmic goitre in Professor Müller's clinic, from whom one half of the thyroid gland had been removed, the exophthalmos disappeared completely from the operated side, but was unaltered on the other. In one a subsequent operation in which most of the other half of the gland was removed resulted in the disappearance of the exophthalmos from the corresponding side. This seems to show that the exophthalmos is sometimes, at any rate, due to direct pressure of the thyroid gland on the cervical sympathetic nerve and possibly on some of the veins of the neck.

In many respects the treatment of typhoid fever in Germany differs from that generally adopted in England. I have already referred to the diet and baths. The dry mouth of typhoid patients is not only a source of great discomfort to them, but it also favours decomposition of the oral contents, which even the most careful cleansing may not prevent. Professor Müller has shown that the dryness is largely due to the mouth breathing caused by obstruction of the nose from catarrh of the mucous membrane. By the regular use of a nasal spray of warm normal salt solution, to which cocaine may be added, the nasal breathing can be facilitated so that the mouth remains fairly moist and sepsis is greatly reduced. Oral breathing in severe cases is also caused by the great muscular weakness which allows the lower jaw to drop. This is remedied by means of a bandage tied under the chin. The liberal diet for typhoid patients, to which reference has already been made, has the additional advantage of increasing the flow of saliva, and hence of maintaining a moist condition of the mouth. This is especially the case if biscuits and dry bread are given, as these stimulate the production of saliva to a much greater extent than milk.

Much less stress is laid upon the importance of keeping typhoid patients quiet in Germany than in England. Not only are they made to sit up in order to have their backs examined, but I have actually heard a professor tell his assistant not to help a typhoid patient taking his shirt off, so that the students in the clinic could see the characteristic way in which

typhoid patients undress themselves. The same professor, in discussing the technique of bathing in typhoid fever, said that the bath should be moved close up to the patient's bed so that he should not have more than two or three steps to walk!

The value of fresh air is not fully appreciated in Germany. Its importance in the treatment of phthisis is, of course, well recognised, although even in sanatoria the patients are frequently insufficiently supplied with fresh air during the night, and in many institutions during the winter the air is excluded from the rooms by double windows, the only ventilation being by means of fanlights.

It is surprising how small a part fresh air plays in the treatment of most other conditions. During the winter months I hardly ever saw an open window, and even on warm spring days it was exceptional to find a ward with an adequate supply of fresh air. Though most hospitals have very pleasant gardens they are but little used by the patients. The garden of one clinic, which is larger than the Guy's park, is only open for half an hour a day for convalescent patients and is then very little frequented. This is not because it is required for other purposes, as it is generally quite deserted. Balconies are comparatively rarely seen at the general hospitals, but even when available they are rarely used. I never heard of any patients, unless they were phthisical, spending the night as well as the day out of doors, even in the finest weather. The stuffy air in the children's hospitals is in striking contrast to the otherwise scientific and up-to-date arrangements.

I was surprised to find that the subject of opsonins, which is probably the most talked about of recent medical discoveries in England, is almost completely neglected in Germany. Few people with whom I conversed had even heard of opsonins, and with one solitary exception I believe that no work on the subject either from a theoretical or practical point of view has been published in the German language. Even if the present enthusiasm for opsonic treatment may be rather exaggerated in some quarters, the whole question is of such great importance that its neglect in Germany is much to be regretted.

In nursing German hospitals have much to learn from England. Nurses seem to spend all their time in the corridors, except when they are actually employed in doing something for a patient, so that during most of the day none of them are in the wards. At night one nurse has often several wards to look after.

Bed-sores are much more common in German hospitals than in England. Everybody who has travelled at all must know that it is only in England that beds are properly made. Many will also be familiar with the huge sort of feather quilt with which every bed is supplied. Although if it is arranged to cover the feet it rarely reaches much above the waist, it is certainly often very welcome in cold weather. But I was astonished to find that during some sweltering days in Strassburg, when an ice-pack would have been the only really comfortable covering, the wretched patients were still covered with these absurd quilts and with as numerous blankets as could be required in the depth of winter.

German hospitals gain greatly in appearance by the universal practice of the staff and assistants of always wearing long white overalls when visiting the wards or working in the laboratories. Not only do the overalls protect the clothes, but they must diminish the chance of carrying infection out of the hospital.

A special word of praise is due to the admirable way in which the more modern infants' wards are arranged. It is believed that the various gastro-intestinal and pulmonary diseases, which are by far the most frequent conditions which necessitate the admission of infants into a hospital, are nearly always infective, and probably also contagious. For this reason each infant has its own special bath, towels, sponge, feeding-bottle and other necessaries. In some clinics the cots with the infant's other belongings are separated from each other by glass partitions. No nurse or doctor is allowed to touch any patient until the hands have been washed with an antiseptic lotion, and at the Charité in Berlin the doctor and nurse have to put on special overalls which hang behind the cots of each infant. By these means it is claimed that the treatment of infantile diseases has become much more successful in recent years.

Wet-nurses are very often employed in the infants' hospitals. They are given the choice of bringing their own children with them or leaving them at home. By judicious management a single wet-nurse is often able to feed four or five infants. Each infant is weighed before and after its feeds, so that the number of ounces it gets is exactly known. If this is not enough, the deficiency is compensated for by giving aditional feeds of cow's milk from a bottle. If a wet-nurse catches a cold, she has

to wear several layers of gauze over her nose and mouth so as not to infect the infants.

It is difficult to say whether in medicine we have more to learn from Germany or Germany from us. Medicine in Germany is more scientific, in England more practical. For the individual patient England clearly offers more than Germany. The nursing is far better, the more practical if in some respects less accurate methods of examination are less uncomfortable though generally equally efficacious, and the treatment—founded on extensive and painstaking clinical observations—is safer and less experimental, though less modern and scientific.

Yet for mankind German medicine does more than English medicine, as the scientific investigation of disease is more minutely carried out in the German clinic than in the English hospital, and it is for this reason that to Germany, not to England, physicians in the United States, Russia and Japan turn for their inspiration.

The ideal would be a combination of the best features of the two great schools. If to the practical teaching and practical work of the English hospitals were added a little more of the scientific enthusiasm and love of laboratory research of the German clinic, we should have a result surpassing the best that is recorded in the history of medicine.

Reviews.

The price of books submitted for review should in every case be stated.

Anæsthetics. By J. Blumfield, M.D. Lond. (Bailliére, Tindall & Cox.) 2s. 6d. nett.

This, the seventh volume of the Medical Monograph Series, is a useful compilation, giving in the shortest possible compass the main points about the subject with which it deals. In such a condensation it would be unfair to look for any detailed account of the various methods, but each of them is described faithfully, though necessarily briefly, while the chapter on the dangers and troubles incidental to anæsthesia is an admirable summary of what the student should know. The book is illustrated with a few useful diagrams.

Gynæcological Diagnosis. By Arthur Giles, M.D., F.R.C.S. (London, Bailliére, Tindall & Cox.) 7s. 6d. nett.

The student who wishes for a cram book would do well to abstain from reading this little work. He, however, who desires to supplement the knowledge to be gained from ordinary text-books might, with advantage, read and digest it. Dr. Giles has adopted a somewhat novel plan—that of working from symptoms to diseases, instead of from diseases to symptoms, and has produced a work which is both original and thoughtful. Roughly, the book is divided into two parts. The first deals with general considerations, case taking, methods of clinical examination, instrumentology, and a clear and lucid discussion of the relative importance of symptoms. Recognising that there are "various conditions in which microscopic examination is necessary for the scientific completion of the diagnosis, but that this final step is open to few besides pathological experts," the author has omitted any extensive reference to microscopical pathology. In a work that is solely intended as an aid to diagnosis and makes no pretence of being complete, such an omission is, we think, advantageous. It leaves the student free to devote his undivided attention to the symptomology. This is discussed in full in the second part, the author adopting the method of summing up the differential diagnosis from the leading symptoms. At the end of each chapter a useful table of symptoms is given. The book is extremely interesting, and the author handles his subject well, but it demands some attention and thought from the reader. It should prove of practical value to those for whom it has been compiled—the senior student and the busy practitioner.

The Diagnosis of Nervous Diseases. By Purves Stewart, M.A., M.D., F.R.C.P. (London; Edward Arnold.)

Under the title of "The Diagnosis of Nervous Diseases" Dr. Purves Stewart has published a collection of lectures, which he has rightly considered worthy of an audience more extensive than could be found at Westminster Hospital, where many of them were originally delivered. The titles of the different chapters will sufficiently indicate the plan of the book, Aphasia—Coma—Pain and other abnormal subjective sensations—Postures and gaits—The cerebro-spinal fluid—Hysteria, etc. That is to say, no attempt is made to contrive an elaborate classification which will include all nervous diseases, but within the limits of a comparatively small volume, will be found a vast deal of information, presented in a way that is easy to remember and easy to apply in practice. To those who are inclined to regard the study of nervous diseases as a dull and mechanical thing, where diagnosis is arrived at by the application of rule of thumb, we especially recommend it. Our interest in any subject varies directly with our knowledge of it, and the grumbles of the ward clerk who finds a nervous case in his bed must only be taken to imply a consciousness of his own great ignorance. Dr. Purves Stewart's book is well fitted to awaken in all who read it an abiding interest in the subject.

Medical Electricity. By H. Lewis Jones, M.D. Fifth edition. Pp. 519 and xv. (H. K. Lewis.) 12s. 6d. net.

It is less than two years since we reviewed the fourth edition of this excellent and well-known handbook, and now another edition has been made necessary by the rapid advances of electrical therapeutics, while it is fully justified by the steady demand there is for the book. Several chapters have been enlarged, especially that on

X-rays, and several pages are devoted to that new treatment of rodent ulcer, in which Dr. Jones has obtained some success, by electrolysing the ulcer with zinc ions.

A large chapter has been added on the electrical treatment of various skin diseases, much of which is of course occupied by Sabouraud's work on Tinea Tonsurans, in the treatment of which such wonderful results are obtained by the application of X-rays. Several pages are devoted to the new method of administering drugs locally by electrolysis; a large pad soaked in the specific drug is applied to the part, and a weak current caused to flow through it. Cocaine anæsthesia is easily induced by this method, and the cocaine shows less tendency to diffuse into the general blood system than when it is injected.

The chapter on the utilization of electric light mains is still included, and very useful it is to the practitioner; but we notice that the appendix has been omitted, which contained details of the nature of the current supplied by various towns in their electric light mains.

Text-Book on Diseases of the Heart. By Graham Steell, M.D. Pp. 387 and x. (Messrs. Sherratt & Hughes.) 7s. 6d. net.

This volume, which is the latest issue in the Manchester University series of medical hand books, is rather difficult to review, as it is unequal in its different chapters. As a series of essays on different aspects of cardiac disease it forms delightful reading, and, full of illuminating observations, it presents many different lines of thought which are fresh to the reader. Having said this in praise of the book, we must, however, remark that it falls far short of the expectations aroused by the title. The numerous omissions render it a most incomplete *text-book*, though perhaps the author's statement that "the statements made do not go beyond the facts of actual experience at the bedside," may perhaps discount the above criticism. However, the fact that no mention, so far as we can find, is made of Rupture of the Valves, Tumours of the Heart, Fatty Heart, Beer Drinker's Heart—shows that the author has chosen a misleading title for his work.

Dr. Steell has written a most scientific and interesting handbook which embodies the results of his actual experience, and pays full attention to all the best work which has recently been done on the pathology of cardiac disease. He is an ardent admirer of Dr. Mackenzie, of Burnley, from whose writings he quotes largely.

The most important new line of teaching enforced in the book is that mitral incompetence very often exists—even in fatal cases—without any valvular lesion. No mitral valves are competent without the assistance of the heart muscle, and, if this fails, then mitral regurgitation takes place without any necessary disease of the valves themselves. The principal valvular disease produced by rheumatic endocarditis is mitral stenosis, and it is difficult pathologically to imagine any condition of the valve curtain which will cause regurgitation without stenosis; so we are to diagnose primary failure of heart muscle in all cases when we hear a mitral systolic bruit, unless we have at the same time some evidence of mitral stenosis. This view is borne out by the frequency with which we see, post-mortem, trifling lesions of the mitral valve in cases which have died of "mitral regurgitation."

We are glad to see emphasis laid on the tenderness of the "heart liver," a sign which is often left out of text-books, and also on the importance of watching the urine as a guide to treatment; but should like to have been told more on the subject of vomiting and sleeplessness in heart disease—two most serious symptoms which require careful treatment. A chapter on hypnotics should be included in all text-books on heart disease. This is purely a clinical handbook, and so we are not given any detailed description of post-mortem appearances; the author has the courage to give no list of the signs of adherent pericardium, and we wish that all writers on medicine would copy his example.

Sport.

Rugby Football.

GUY'S v. DUBLIN UNIVERSITY.

This match at Honor Oak Park, on November 23rd, provided a capital game, notwithstanding the state of the ground, in which the Hospital ran out winners by three points, scoring a goal and two tries to a goal and a try.

The Hospital won the toss, and started against a slight wind. The opening scrums settled in the Dublin territory, and Jones, getting the ball away to McEvedy, that player transferred to Morgan, who beat several opponents and scored wide out within five minutes of the start. Saunders failed with the kick.

The Dublin forwards, roused by this early reverse, from the kick-off went away with any amount of "devil," and took play to the home twenty-five, when Lee scored splendidly, and found touch at the half-way line. The game, however, soon returned to near the Guy's line. At this time the Guy's forwards seemed to be upset by the rushing tactics of the Irishmen, and absolutely lacked life; in fact, it was only due to fine defence of the home back division that Trinity did not score several times, and their own line was seldom threatened. Once we looked like getting in, if McEvedy, who received on the Dublin twenty-five line, had sent out to Jones, Digby and Stringer, instead of heading back for the scrum.

At last the inevitable happened; from a line out on our goal line, three Trinity forwards being unmarked, Garstin fell over with a try. Thrift added the major points.

This seemed to rouse our forwards, and on resuming they went away with a rush into the Dublin territory, but Huggard relieved with a good kick, and half-time was whistled.

From the restart our pack started a different game, and quite held the upper hand, and a fine dribble by Saunders from the half-way to the Irish line placed Guy's in an attacking position. From the ensuing scrum a kick was given against the Hospital for "picked out," but the Dubliners were whistled back for "off-side," and Digby went in with a try for Saunders to convert.

Guy's continued to press, and J. P. Jones, going round the blind side, gave to Mullins, who scored rather wide out, but this was not allowed. Play was taken to mid-field, when Digby, picking up, ran to the Irish line, and passed to Morgan, who scored between the posts. Archer took the kick, but the ball hit the upright.

The Dublin forwards once more returned to the attack, and by means of a forward rush transferred play to our twenty-five, where Harpur got over wide out.

Thrift failed with the kick, and the game ended as stated. Team:—

GUY'S.—H. Lee (back); E. T. Morgan, P. F. McEvedy, W. E. S. Digby, L. B. Stringer (three-quarters); J. P. Jones, P. Monaghan (halves); S. McK. Saunders, W. G. Pinching, H. R. Mullins, A. Alcock, H. Archer, E. R. Hind, A. H. Crook, C. G. Sprague (forwards). Referee, Mr. R. S. V. Dyas.

GUY'S v. LONDON IRISH.

Played on Saturday, November 24th, at Honor Oak Park. Guy's, who were without J. P. Jones, were decidedly off-colour.

The home side won the toss, and the Irish kicked off towards the pavilion. Play started in mid-field, and the ball coming away a passing movement was started, but Stringer was pulled up in the Irish twenty-five. Our forwards kept up the pressure, and from a pass by Alcock, Lee, running strongly, made a lot of ground. The London Irish were next forced to touch down. From the drop-out Guy's continued to press, but a free kick against the hospital for foot-up took play to mid-field, and a forward rush by the Irish forwards invaded our territory. Digby relieved with a good dribble, taking the ball to half-way, but our opponents returned to the attack with a forward rush. Cane found touch with a good kick; then the Irish three-quarters got going, but Duke relieved with a long kick down the field, which the Irish full-back mulled. By this time the home forwards seemed to have lost their game; either getting the ball and being shoved off it, or wheeling and leaving the ball behind, and they seemed quite unable to cope with the Irish forward rushes. The Irishmen, by means of another forward rush, returned to our territory and forced a touch-down. From the drop-out, play settled at half-way, but a pass along the ground by Rutter enabled the Irish forwards to once more get away. Duke miskicked; the ball dropping into an Irish three-quarter's hands, they started a passing movement; this being stopped by some good tackling the movement developed into a rush and scramble, and an Irishman knocking-on across our line and touching down, a try was allowed. The major points were added. Soon after half-time was whistled.

From the re-start the Irish pressed, but a free kick against them gained us some little ground, and shortly after a magnificent run by Lee from mid-field resulted in his scoring between the posts. From an easy position Saunders failed with the kick. A good dribble by Saunders was the next thing of note, then a rush by our forwards, but by kicking too hard they allowed the Irish full-back to bring off a seventy-yard kick, which transferred play to our twenty-five. A forward rush and a good kick by Lee relieved and play returned to the Irish territory, and after several scrums Stringer tamely punted across their line and allowed them to touch down; and so the hospital's last opportunity was lost. The closing stages being notable for several free kicks and a good follow up and tackle by Mullins, no further scoring took place, and time left the hospital beaten by five points to three.

GUY'S.—H. L. Duke (back); L. B. Stringer, W. E. S. Digby, H. Lee, W. S. Rutter (three-quarters); P. J. Monaghan, H. L. Cane (halves); S. McK. Saunders, H. R. Mullins, W. G. Pinching, A. Alcock, H. Archer, G. R. Hind, A. H. Crook and C. G. Sprague (forwards).

REMARKS.—Duke as back was off colour, perhaps on account of the nasty kick on the knee he received early in the game. Lee played the best game on the side, and Digby's tackling was good, but he seemed absolutely unable to hold his passes. Both the wings were poor, especially in defence. The halves were slow, even allowing for the off-side tactics of the Irish. The forwards were off their game; no doubt the hard game on the previous Wednesday having something to do with it.

Hockey Club.

The Annual General Meeting was held on October 17th. Mr. F. J. Steward presided. The following were elected offices:—President: Mr. F. J. Steward; Vice-Presidents: Mr. C. H. Fagge, Mr. Ormond. Captain: G. W. Dryland; Vice-Captain: C. B. Ticehurst; Hon. Sec. and Treas.: G. Y. Thomson; Committee: M. Leckie, W. Clark, J. Smith, F. Kahlenburg, H. Gibbons Unfortunately, we have been unable to obtain a ground for this year, but some matches have been arranged so as to enable members of the team to play together before the Cup Ties. G. Y. THOMSON.

Birth.

WILLAN.—On November 13th, at Milton, Sittingbourne, the wife of George T. Willan, B.A. Camb., M.R.C.S. Eng., L.R.C.P. Lond., of a son.

ED.—C. L. L.

GUY'S HOSPITAL GAZETTE.

VOL. XX., No. 482.] DECEMBER 15, 1906. [SIXPENCE.

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Passim.

THE Calendar, which alters at no man's wish, has obliged us to anticipate Christmas by ten days. For this is the Christmas issue, and, in accordance with time-honoured custom, it is the Passimist's pleasant duty to wish all his readers, and everyone connected with our Institution, whether they are readers of this journal or not, and whether their association with the Hospital is permanent or merely temporary, the best of good Christmas wishes.

THE RESIDENTS' THEATRICALS are due to take place on the evenings of Wednesday, Thursday and Saturday at 8.15. There is some uncertainty at present whether the performances will take place this year in the Court Room, as of old, or whether there will be a departure this year from the ordinary custom, and the Physiological Theatre be utilised. The latter arrangement is highly probable, but the point is not yet definitely settled. The Physiological Theatre offers more seating accommodation, and the additional advantage of a larger stage; special arrangements would also be made for the comfort of the audience. Whatever is finally arranged we hope that these performances will be as successful this year as they have been hitherto. The Residents are again running to three nights, so that those of the men who may wish to see the theatricals may come and bring their friends. The arrangement worked very satisfactorily last year, and no doubt will do so again. We are requested to announce that application for tickets for the Theatricals must be made as early as possible to the business manager, Mr. Herbert Knight.

PROVISIONAL CHRISTMAS FESTIVITIES.

On December 26th, 27th and 29th, at 8.15 p.m.

PROGRAMME.

1. Residents' Theatricals — "That Brute Simms," adapted from Arthur Morrison's Short Story.
2. Concert.
3. Topical Farce.

On Christmas Day, 2—4.30, Out-Patients' Tea.

Niggers go round on Christmas Day as usual.

Ward Concerts.

Wednesday	at 5.	Patience and Samaritan.
Thursday	at 3.	Addison.
	4.30.	Mary.
	3.	Job.
	5.	Dorcas and Naaman.
	5–7.	Eyes.
Friday	at 3.	Charity, Christmas Tree.
	3.30.	Martha, Christmas Tree.
		Queen and Stephen, Concerts.
Saturday	at 4.	Lydia, Christmas Tree.
		Cornelius, Concert.
		Esther, Concert.

The appeal on behalf of Mrs. J. H. Bryant, which we publish in another part of this issue, comes at a particularly opportune moment. Few of us take our Christmastide in the narrow sense in which Thomas A'Beckett took his, following the strict text of the Vulgate, and limiting our charity to men of good will. Under the circumstances there are many of us who will spare a thought for the colleague, teacher and friend who was with us but a year ago, and respond to the appeal of the Committee for funds "to be invested for the education of his children." Subscriptions should be sent to the Honorary Secretary, Dr. T. G. Stevens, 8, Weymouth Street, Portland Place, W.

Elsewhere we publish a criticism of the Musical Society's concert on Tuesday last from the pen of Mr. Herbert Bath. Mr. Bath, Goring-Thomas Scholar at the Royal Academy of Music, is himself a pianist of considerable repute and a composer of several major orchestral and choral works, one of which was performed at the Queen's Hall last week, and the value of his interesting critique will be appreciated by all who took part in the concert.

We are requested to draw the attention of members of the Students' Club who are in the habit, as most of are, of us journeying to Honor Oak Park grounds, to the fact that it is highly desirable that all unused tickets should be forwarded to the Medical School before the end of the present month. The financial year of the London, Brighton and South Coast Railway ends on the 31st inst., and it is necessary, in order to get credit for unused Honor Oak Park tickets, that they should be returned to the company before that date. Last season quite a number of tickets, dated 1905, were returned to Mr. Croucher in January, and even later, and it is highly desirable that such an oversight should not occur again. Those who possess unused tickets are therefore kindly requested to forward them to the Medical School Office during the last week of the present month.

The catering question threatens to meander along lines similar to those which served for the world-renowned case of "Jarndyce *versus* Jarndyce." They established committees of inquiry in that famous legal imbroglio, with the result that "in course of time it became so complicated that no man alive knows what it means." The general meeting of the Students' Club, which was called to discuss the catering question, appears to have acted on the same principle as that which a famous law lord once declared was his customary stand-by: "When you can't do anything, appoint a committee." The meeting has appointed a committee—a committee without power to do more than talk, and with no means of obtaining reliable information unless Mr. Wade strains his courtesy so far as to act up to the thirteenth chapter of the first epistle to the Corinthians. That, indeed, is more than one can reasonably expect, though it would doubtless be a good stroke of policy on the part of the Steward to initiate some of the committee members into the expenses of the kitchen.

We hold no brief for the caterer. On the contrary, the Gazette has on more than one occasion pointed out that there were grave objections to the present system. But at the same time, it is only fair to mention that during the past three months there has been a decided improvement in the dining-hall arrangements. Great reforms are not achieved in a day, and we believe we are right in saying that the present caterer has honestly tried his best to bring about some measure of reform. The critics at the general meeting were, as critics usually are, destructive. Not one, with the exception of Mr. Stebbing, whose suggestion that the catering should be entrusted to an outside firm is at least worthy of consideration, outlined a scheme of reconstruction that would stand criticism in its turn. The proposal to appoint a steward on the lines of an ordinary club, is one which is obviously outside the scope of a general meeting to discuss, and it appears to us that members have not sufficiently grasped what such a proposal, if carried into effect, would mean. On the whole the general meeting has had a good result in so far that it has enabled members to blow off steam. Whether it will do any further good remains to

be seen, and comment may be postponed until the committee brings out its report—if it ever comes so far.

Heartiest congratulations to Mr. A. Alcock, who has attained International honours in the Rugby Football world. Mr. Alcock, who has been playing extremely well all through the season, both for Guy's Hospital and for Surrey County, attracted the eye of the English selection committee when Surrey played Kent. Since then he has been selected to play in the trial match for the Rest of England, when he played a very fine game. He was chosen as one of the English forwards in last Saturday's match against the South Africans at the Crystal Palace, where he fully justified his inclusion in the team. His selection is the more gratifying to Guy's men, because he has never played for any "outside" club—which shows that it is possible to get an English cap without playing for Richmond or Blackheath.

In the current number of *The Independent Review*—a monthly with which some readers are possibly unacquainted—there appears an article from the pen of Dr. James Rigby, Surgeon to the Lancaster Victoria Royal Infirmary, which is of interest to medical men. Dr. Rigby, who does not hail from Guy's, is exceedingly wroth at the idea that newly-fledged medical practitioners should possess what he is pleased to call "The Power of Life and Death." In an ably-written paragraph he sketches the course of the young surgeon's career, dilates on the prevalence of so-called exploratory operations, and draws attention to cases in which an operation is advised, although there is no reasonable hope that it can do any good. "Is the surgeon to blame," he asks, in a sentence which it is surprising to find the *Daily Mail* has not yet fastened upon, "if he acts the part of friendly executioner?" He goes on to remark that "there is no reason why the operating surgeon, in case of dire failure and loss of human life, should not be called upon to vindicate his conduct and capacity," and pleads for the establishment of a court of enquiry, before which every surgeon who has "failed" should be indicted. That, he argues, can be done with a carpenter, or an architect, or a tradesman; why not, then, with a surgeon?

It is a grave charge—or rather series of charges—which Dr. Rigby brings against the profession, and, coming from such a source, and appearing in such a guise, it cannot fail to influence the man in the street. One is tempted to remind the author of the proverb anent the foolish bird that fouls its own nest, but the article is evidently written in good faith, and Dr. Rigby no doubt imagines that he is doing the profession a deal of good. Medical men and medical students who are acquainted with the facts which he puts forward in a somewhat one-sided manner, will be able to discriminate; the lay reader will accept without question, on Dr. Rigby's authority, the statement, insinuated if not actually expressed, that there are surgeons who act the part of friendly executioner, and that the average newly-fledged practitioner performs important and grave operations with the reckless insouciance of a Chambuddy Ram. With the suggestion of a court of enquiry it is superfluous to deal, but if Dr. Rigby was not so egregiously serious he might have spared a smile for the Gilbertian situations which his proposed court of enquiry inevitably conjures up. As it is, his solemnity of expression will doubtless captivate a section of his lay readers, who forget, in their indignation at a state of things which exists only in the author's imagination, that the patient is already safeguarded by the law against wilful neglect and "superfluous manipulation."

Appointments.

Medical School Appointments.

The following appointments have been made by the Treasurer upon the recommendation of the Medical Council:—

Clinical Assistants.—Messrs. J. S. Bookless, S. W. Daw, P. F. McEvedy, G. F. Stebbing, W. H. Trethowan, E. Wragg.

Dressers in the Throat Department.—Messrs. M. M. Earle, A. T. Densham, R. R. Walker, E. B. Hinde, C. H. Rippmann, J. N. Watson.

Surgical Ward Clerks.—Messrs. J. R. Perdrau, J. L. Atkinson, G. F. Haycraft.

Assistant Surgeons' Dressers.—Messrs. V. Townrow, H. Lee, S. H. Browning (Sir A. Fripp); T. Stansfield, A. D. V. Taylor, A. E. Rayner (Mr. Steward); H. I. Janmahomed, W. E. Wallis, C. F. Searle (Mr. Fagge); A. R. Khalakdina, H. W. Heasman, D. C. Druitt (Mr. Rowlands).

Medical Ward Clerks.—Messrs. H. O. Brookhouse, S. S. Brook, H. E. H. Mitchell, D. Reynolds, A. E. Lees, P. S. Price, L. Mandel, V. P. Hutchinson, H. R. Mullins, H. A. Sanford, H. Shahin, K. Hole, H. Chapple, R. G. Oram, D. Allan, M. M. Adams, F. C. V. Thompson, F. R. L. Atkins, M. M. Cowasjee, C. M. Plumtre, R. V. Rankine, Q. H. Richardson, A. E. P. Cheesman, T. F. Brown, H. B. Kent, C. G. Sprague, A. L. George, A. H. Crook, L. W. Evans, R. C. H. Francis, C. C. Holman, A. D. J. Williams.

Post-Mortem Clerks.—Messrs. A. W. F. Denning, L. L. C. Reynolds, F. H. Fuller, W. Johnson, J. H. Ryffel (Jan.–Mar.

Aural Surgeon's Dressers.—Mr. C. H. Rippmann.

Obstetric Dressers.—Messrs. H. J. Henderson, K. H. Digby, N. Flower (Dr. Horrocks, Jan.–Feb.).

The late Dr. J. H. Bryant.

Guy's Hospital,
December, 1906.

Dear Sir,

A Committee, whose names appear below, has been formed to help Mrs. J. H. Bryant, who has been left very badly off. The Committee believes that the best way of doing this would be to raise a sum of money, to be invested for the education of her three children.

Subscriptions should be sent to the Honorary Secretary: Dr. T. G. Stevens, 8, Weymouth Street, Portland Place, W.

We are,

Yours very truly,

Frederick Taylor (Hon. Treasurer).
W. Hale White (Chairman of Committee).
Ilbert Hancock.
Thos. Chant.
John Fawcett.
F. J. Steward.
J. W. F. Jewell.
Gerald Sichel.
Thomas G. Stevens (Hon. Secretary).

Preliminary List of Subscriptions.

	£	s.	d.
Dr. J. F. Goodhart	52	10	0
Dr. Frederick Taylor	52	10	0
Mr. Golding-Bird	52	10	0
Dr. Hale White	52	10	0
A Friend	50	0	0
Dr. Fawcett (payable in three annual instalments)	30	0	0
Mr. W. Ilbert Hancock (payable in three annual instalments)	30	0	0
Mr. Maggs	26	5	0
Mr. F. J. Steward	26	5	0
Mr. H. L. Eason (payable in three annual instalments)	21	0	0
Dr. J. W. F. Jewell	21	0	0
Dr. T. G. Stevens (payable in three annual instalments)	12	12	0
Mr. R. P. Rowlands	5	5	0
Mrs. Fleming Baxter	5	5	0
Mr, Philip Turner (payable in three annual instalments)	3	3	0
Mr. Pullbrook	2	2	0
Mrs. Harding	1	1	0

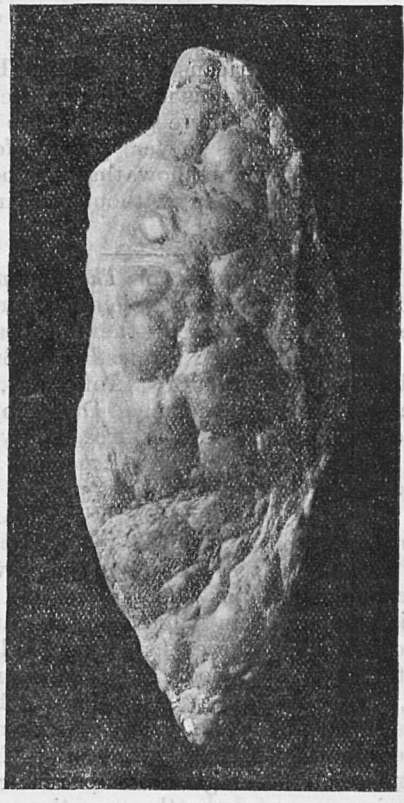
If desired, subscriptions may be paid in three annual instalments.

Clinical Notes.

The Liver in Splenomegalic Cirrhosis.

In his interesting clinical lecture upon Splenomegalic Cirrhosis, Dr. Hale White refers to the large masses of liver-substance separated by fibrous tissue which were present in the example of cirrhosis which formed the subject of the lecture.

It has occurred to me that in connection with this unusual appearance the enclosed photograph may be of interest. Only a small portion of the liver is represented,



A portion of a liver from a case of Splenomegalic Cirrhosis.

but the appearance was the same over the whole surface, and on section, as in Dr. Hale White's case, the separated areas of liver-substance much resembled masses of new growth.

The case from which this specimen was obtained was referred to by me in the discussion upon cirrhosis of the liver at the annual meeting of the British Medical Association, held in Edinburgh, in 1898. I referred to the case as an example of Banti's disease. Dr. Drummond, of Newcastle, although apparently unaware of Banti's description, briefly referred to a similar case during the same discussion. So far as I am aware these

were the two first cases answering to the description which had attracted attention in England.

In the case which came under my own notice in the post-mortem room there had been attacks of pain in the spleen, associated with rise of temperature, on three or four occasions during the space of three years. The spleen, however, was much enlarged when the youth, then sixteen years of age, first came under observation, and there is little doubt that the enlargement had already existed for some time. The spleen, after death, was found to weigh 29½ ounces, and the liver 35½ ounces.

My post-mortem experience has been considerable, but I have not met with another instance of cirrhosis of the liver in which the appearance, either on the surface of the liver, or on section, resembled this. I have not closely followed the description of the liver in published cases of splenomegalic cirrhosis, but a search through records might show that the appearance is more or less characteristic. T. F.

Correspondence.

To the Editor of GUY'S HOSPITAL GAZETTE.

Text-book on Diseases of the Heart,
By Dr. Graham Steell.

SIR,—The reviewer of this text-book, while he evidently admires it in many details, laments some omissions, amongst others, an account of "beer-drinker's heart."

I have not seen this text-book, and my only knowledge of Dr. Graham Steell is from previous writings by him, yet it may not be out of place to remark that the omission cannot be due to the fact that Dr. Graham Steell is not famliiar with this form of cardiac disease. A most admirable account of alcoholic disease of the heart—from the clinical stand-point—was published by him in the *Medical Chronicle* about fourteen years ago. To the best of my belief, when Dr. Graham Steell wrote this he was unaware that the deleterious effect of alcohol had been noticed in Germany.

It may be added that possibly the name of Dr. Graham Steell is not very well known in schools of medicine in London, because many of his writings have not appeared in the most widely-read journals. Yet those interested in cardiac disease, who are familiar with his work, may agree with me that as a clinical observer in this field he is probably surpassed by none.—Yours very truly,

ONE WHO HOPES TO READ THE BOOK.

A Guy's Song.

SIR,—It is agreeable to read of Mr. F. A. Barker's keenness in the matter of a Guy's Song, and I sincerely hope his letter may rouse some of our poets to action in the matter.

To pass from the sublime to the ridiculous, may I mention that those pleasant "Smokers," which seem unfortunately to be a thing of the past, had their Guy's Song in the form of the old ditty, "Neckinger Nora"—a merry enough song, but certainly not one suited to either the Musical Society's concerts or the Christmas festivities.—I am, yours truly,

AN OLD EXTERN.

In Lighter Vein.

SIR,—"A. N. C.'s" researches into the physiology of the purring of cats need not be further *purr*-sued. It is well known that a "cat purrs because it is made o' purpose (a purr puss)."—Yours faithfully,

G. A. WRIGHT.

Westbrook,
Bowdon, Cheshire.

Change of Address.

Dr. W. Frank Colclough, from 74, Hough Green, Chester, to Hillsdon, Sidmouth, Devon.

Dr. G. H. Field, from Forest Corner, Chester Road, Bournemouth, to 280, Christchurch Road, Bournemouth.

Dr. R. Sydney Harper, from Guy's Hospital, to the Miller Hospital, Greenwich Road, S.E.

Mr. H. T. Hicks, F.R.C.S., from 4, St. Thomas's Street, S.E., to 15, Portman Street, Portman Square, W. Telephone, 3474 Mayfair.

Dr. Arthur Pearson, from 56, Grange Park, Ealing, to 28, Woodville Gardens, Ealing, W.

Mr. Owen Richards, M.D., F.R.C.S., from Turf Club, Cairo, to Charieh el Cherifein, Cairo.

Mr. A. Buxton Ryle, L.D.S. Eng., from 19, Highbury Terrace, London, N., to 24, Beaumont Street, Oxford.

Dr. T. Morland Smith, from Newbury House, Bournemouth, to Heron Court House, Charminster Road, Bournemouth.

Dr. I. Valerio, from Guy's Hospital to San José, Costa Rica, Central America.

Dr H. M. M. Woodward, from Purley, Surrey, to Grantley House, 82, Royal Parade, Eastbourne.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Appointments.

Civil.

CRISP, J., M.R.C.S., L.R.C.P. Lond., has been appointed District Medical Officer of the Market Harborough Union.

GIRLING, C. J., M.B. Lond., has been appointed Certifying Surgeon under the Factory and Workshop Act for the Cranbourne District of the County of Dorset.

HARPER, R. SYDNEY, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Junior House Surgeon at the Miller Hospital and Royal Kent Dispensary, Greenwich Road, S.E.

Pasteur, the Believer.

"Great geniuses," said Emerson, "should have the shortest biographies." It is a statement that needs qualification. Brevity is an immorality in biography as much as it is an excellence in wit. If a man's life is worth writing, if his deeds are worth describing, they are worth description in detail. If epitaphs are to serve for life histories, we might as well live in a world of tombstones. "Look around if you wish his monument" is all very well, but it is unsatisfactory. We want to know what inspired the work, what originated the thought, what, in fact, developed the genius and gave it the power to make its individuality triumph. Even the greatest of us improves on closer acquaintance. Practically, perhaps, we are no gainers by knowing how Velasquez struggled to secure that indefinable grey which pervades the "Column" picture. But intrinsic values are not always the best estimate of worth, and he who delights in reading biography relishes detail, the account of minute facts, worthless in themselves, yet illuminative when taken together as points of character and temperament.

Those of us who differ from Emerson will thank M. Vallery-Radot (and detach a measure of gratitude for his excellent translator) for having given us so essentially human a character sketch of the great layman whose name is indelibly associated with bacteriology. The acute critic makes a poor biographer, and M. Vallery-Radot is sufficiently sympathetic to worship his hero to the extent of overlooking the latter's deficiencies. This technical fault, however, adds a charm to the book which makes one readily overlook the error. It enables us to recognise the man, where a critic would have made us see the genius. Of Pasteur as a scientist, a bacteriologist, a chemical expert, a sericiculturist, and an investigor, we know enough to judge for ourselves the extent of his greatness. It has remained for his pupil to give us a sketch of his failures, of his difficulties, of his character as a man,—a sketch written so sympathetically, so humanly, and so simply, that it makes one of the most interesting and fascinating biographies published of late years. One is tempted to quote from every page, for each holds an idea, a thought, an incident, which can be lingered over and loses none of its charm by repetition. But a review has its limits, and after all no one can do better than read the book for himself. Quotation can only give a glimpse of its excellence.

Louis Pasteur was born on December 27th, 1822, the only son of humble parents, settled at Dôle. His ancestors had been serfs of the Counts of Udressier, who by special grace, and for the sum of twenty-four gold livres, had purchased their enfranchisement from the stain of mortmain, and had become yeoman farmers. Jean Joseph, his father, had followed the great Napoleon, taking part in that heroic stand at Leval, and witnessing the sad downfall of the first Empire, the defeat at Waterloo, and the establishment of the new régime under the white cockade. Weary of war and sick at heart, the old sergeant settled down to civil life. He founded a tannery, married a gardener's daughter, and lived peacefully in the Rue des Tanneurs. Here young Louis was born, and we learn that at the village school he was by no means a genius at acquiring knowledge. He delighted in out-door sports, but avoided bird-trapping: the sight of a wounded lark was painful to him. When sixteen years of age he went to Paris, to the Normal College, to work for his "*baccalaureat*"—a step which had been decided upon after much family discussion. Funds were low, but the old sergeant, who took a pride in his boy's ambition to learn, scraped together enough money to pay the fare to Paris—a two days' journey by coach—and a good friend of the family agreed to take the boy at reduced fees in the Latin Quarter. But at Paris, Louis Pasteur became indescribably home-sick, and his father fetched him back to Arbois. Here he studied under M. Romanet, the village schoolmaster, and interested himself in painting and sketching, but at last he went to the college at Besançon to prepare for the course at the Normal College. In 1840 he took his B.A. here, his report showing that he was good in the literary subjects, good also in history and geography, and very good in elementary science. After passing his examination he accepted a post as usher at the Royal College of Besançon, a post of which the stipend was a beggarly 300 francs a year. It is always interesting to note what books influenced a man's life. Pasteur, it seems, delighted in the optimistic philosophy of Joseph Droz—Sainte Beuve's ideal upright man—and in the sentimentalism of Silvio Pellico's *Miei prigioni*, "every page of which," he said, "breathes a religious perfume that exalts and ennobles the soul." He worked hard, getting up at half-past five, and trying to earn a little by coaching. At the same time he wrote rather "priggish" letters to his sisters, and to his father. He abhorred mathematics, which he had to teach, but read botanical and chemical works when he could

get them. In 1842 he took his *baccalaureat* in science before the Dijon faculty, passing low down in the list. In chemistry, it is interesting to note, he was put down as "mediocre" by the examiners. Then he went to Paris, to the Sorbonne, to work "for all he was worth." He attended the lectures of the chemist Dumas, and formed a close friendship with a young literary aspirant, Chappuis. Here he read largely at the Sorbonne library, and whenever he had the chance he experimented. At the chemistry classes the lectures were given "on the blackboard." Phosphorus, for instance, was never burned—it was too rare. So Pasteur went to a butcher and bought bones, out of which, with much labour and worry, he extracted the element. It was his first scientific joy.

About this time he published his first papers. His earliest thesis is a study of the arsenites: this was followed by a paper on the rotatory polarisation of liquids. He was now working at crystallography, a study which had for him the same enthralling interest that it had for the veteran Biot. Every week he wrote long letters to his father, who must soon have learned to know as much about crystals as his son. Then, suddenly, he sprang on the scientific world a brilliant essay on dimorphism. He sent a copy of his paper to his old master, Romanet, who was in the habit of giving second-hand lectures on crystallography to the village boys from the notes that Pasteur sent him. But when the pamphlet on dimorphism arrived, M. Romanet was quite overwhelmed. To his boys he said, "It's no use your reading it; it's much too stiff for you;" to himself, "What the devil does the boy mean? Dimorphism—why, the word is not even in the dictionary."

Then came the troublous days of 1848. Pasteur, impulsive and inherently patriotic, gives all his savings to the Committee. He writes to the old sergeant telling him about the affair, but Pasteur père, a sadder and wiser man, who has seen many political changes, thinks it an unwise transaction. "You should at least have obtained a receipt," he writes, So, after this period of national exaltation. Pasteur returned to his crystals. There is no space to quote *in extenso* M. Vallery-Radot's brilliant account of the isolation of racemic acid; one excerpt must suffice.

> "Pasteur's discovery became known. Ballard, in his strident voice, spoke of it in the library of the Institute, which is a sort of drawing-room for talkative old Academicians. Dumas listened gravely; Biot, old Biot, then seventy-four years old, questioned with scepticism. 'Are you quite sure?' he would ask, his head a little on one side, his words slow and slightly ironical. He could hardly believe that a young doctor, fresh from the College, should have overcome a difficulty which had proved too much for Mitscherlich. Biot said, 'I would like to investigate that young man's results.'"

So an arrangement was made. Pasteur came, and Biot supplied the paratartaric acid. He prepared the solutions himself, suspicious that there might be some trickery, and carefully watched Pasteur. The latter took the crystals out of the mother liquid, and divided them into two groups, left and right, and placed the solutions made from them in the polariser. Biot looked, satisfied himself that an actual deviation took place, and then, in the manner of French scientists, embraced Pasteur. The friendship so formed was to prove a lasting and noble one, and it was largely through the old man's support, both moral and material, that the young savant was able to continue his researches, and do greater things.

It is instructive to consider under what conditions scientists worked at that period. "Claude Bernard, Majendie's curator, worked in a cellar; Wurtz had a lumber room in the attics of the Dupuytren Museum; Sainte Claire Deville was relegated to a miserable corner; Dumas had an unhealthy room at the Sorbonne. Every scientist who had no private means to draw upon had to choose between the miserable cellars and the equally miserable garrets, which were all that the State had to offer. Yet all this was more tempting than a Professor's chair in a college, or even in a faculty, for there one could not give one's self up entirely to one's work."

Pasteur, however, was forced to take a post as teacher. He went to Strasburg, where he was appointed to the chair of Chemistry. Here he married a daughter of M. Laurent, the rector. His proposal of marriage, made, as was the then custom, to the father, read as follows:—

> "Sir,—An offer of the greatest importance to me and to your family is about to be made to you on my behalf, and I feel it my duty to put you in possession of the following facts which may have some weight in determining your acceptance or refusal. My father is a tanner in the small town of Arbois in the Jura: my sisters keep house for him, and assist him, taking the place of my mother whom we had the misfortune to lose in May last. My family is in easy circumstances, but with no fortune. I do not value what we possess at more than 50,000 francs, and as for me, I have long ago decided to hand over to my sisters what should be my share. I have, therefore, absolutely no fortune. My only means are good health, some courage, and my position at the University. I left the Ecole Normale two years ago, an *agrégé* in physical science. I have

held a doctor's degree eighteen months, and have presented to the Academy a few works which have been well received, especially the last one, upon which a report was made which I now have the honour to enclose. This, sir, is all my present position. As to the future, unless my tastes should completely change, I shall give myself up entirely to chemical research. M. Biot has often told me to think seriously of the Institute: perhaps I may do so in ten or fifteen years' time, and after assiduous work; but this is but a dream, and not the motive that makes me love science for science's sake. . . . My father will himself come to make this proposal of marriage.—Accept, etc.

"P.S.—I was twenty-six on December 27th last."

The struggles for recognition, the defeats for the membership of the Institute—the French equivalent of the F.R.S.—the excellent work on the silk-worm plague, the search after pure racemic acid, the synthesis of this substance, the brilliant series of bacteriological discoveries, commencing with the elucidation of the cause of chicken-cholera, and ending only with the great savant's death, the glorious fight against spontaneous generation, with its sprinkle of amusing incidents, the quarrel with the Turin school, and the ultimate world-wide acknowledgment of his work and teachings—for an account of these one must go direct to the book, wherein they are given in full. But there is one chapter in Pasteur's life that gives a greater insight into his character than all the rest—that which deals with his grave illness. It is a chapter of profound sadness. Stricken in the prime of life with a disease that was said to be incurable, helpless as an infant, paralysed, with all his work mapped out and no means of beginning it, above all, with the shadow of an awful calamity hanging over his country, the man maintained the genial optimism that Groz had taught him. Pasteur was essentially a believer, as all great men are. He believed in his work, in himself, and in his country. His friends persuaded him to retire from Paris when the advance of the victorious Germans could no longer be checked. He resisted at first, and it needed the brutal, yet kindly-meant, argument of Sainte Clair Deville, "You would be a useless encumbrance, and we want all the milk for the babies," to induce him to retreat. Away in the country he lived the most despairing years of his life. When Chevreul's solemn protest against the bombardment of Paris reached him, "he felt that he, too, might give vent to the proud plaint of the vanquished. He remembered, with a sudden bitterness, the diploma which he had received from the University of Bonn. So he wrote to the head of the Faculty of Medicine at Bonn, "The sight of that parchment is odious to me. I feel offended at seeing my name, with the qualification of Virum Clarissimum that you have given it, placed under the name which is henceforth an object of execration to my country, that of Rex Guilelmus. . . . While highly asseverating my profound respect for you, sir, and for the celebrated professors who have affixed their signatures, ... I feel called upon by my conscience to ask you to efface my name from the archives of your Faculty, and to take back that Diploma, as a sign of the indignation inspired in a French scientist by the barbarity and hypocrisy of him, who, in order to satisfy his criminal pride, persists in the massacre of great nations. . . . . Written at Arbois, on January 18th, 1871, after reading the mark of infamy inscribed on the forehead of your King by the illustrious Director of the Museum of Natural History, M. Chevreul." To this the Principal of Bonn University replied by a letter which he probably regretted after he had sent it. "Sir," he wrote, "the undersigned, now Principal of the Faculty of Medicine of Bonn, is requested to answer the insult which you have dared to offer the German nation in the sacred person of its august Emperor, King William of Prussia, by sending you the profound expression of *its entire contempt.* P.S.—Wishing to keep its papers free from taint, the Faculty herewith returns your screed." In striking contrast to this many-adjectived absurdity is Pasteur's dignified rejoinder, "After reading over your letter and mine, Mr. Principal," he writes, "I sorrow in my heart to think that men who have spent a lifetime in the pursuit of truth and progress should address each other in such a fashion, founded on my part on such actions. You speak to me of taint. Mr. Principal, taint will rest until far distant ages on the memory of those who began the bombardment of Paris, when capitulation by famine was inevitable. . . . There are times, sir, when the expression of contempt in a Prussian mouth is, for a true Frenchman, equivalent to that of Virum Clarissimum, which you once publicly conferred upon me."

Few of us can realise the poignancy of his grief when the end became inevitable; but how totally free from despair was his bitterness, one has to read M. Vallery-Radot to find. He continued optimistic at a time when all France had given way to wailing and futile appeals to neighbours who, as Bismarck observed, had the sense to prefer sentiment and seclusion to active interference. When the actualities of war

reached Artois itself, when he went over the battlefields and saw the retreat of the Southern army, he was philosophic enough to remark that he now understood much better what the retreat from Moscow must have been like. When he heard that his old laboratory was in ruins, and the Academy riddled, he found consolation in the thought that "now they will build us a better work-place; the old one was hardly fit for precise experiment." It was not a callous indifference; it was the bravery of a man who jokes to keep himself from tears. The period 1870–1880 is at once the most interesting and enthralling of all the chapters in his life.

There is no possibility of quoting more, great as the temptation is to borrow to an extent exceeding the bounds of legitimate extraction. To those interested in biographical works, no better advice can be given than to read M. Vallery-Radot's book. Mrs. Devonshire has carried out her task of translator in a manner that leaves little to be desired, and Messrs. Constable are to be congratulated on issuing so excellently-printed a work at a price which puts it within the means of everyone.

The Life of Pasteur. By Rene Vallery-Radot. Translated by Mrs. R. L. Devonshire. London: Archibald Constable & Co. 7s. 7d. net.

Notice.

Bacteriologist.

A Joint Committee of the County Councils of the East and West Ridings of Yorkshire and the County Boroughs of Bradford, Hull, Leeds, Rotherham and Sheffield, are desirous of obtaining the services of a Bacteriologist to carry out an investigation as to the conditions of the milk supply of the district.

The investigation is to be continued for twelve months, and the remuneration offered is £250 for that period; any out-of-pocket expenses will be paid and all necessary apparatus provided by the Committee.

Applications, with testimonials, should be sent to the undersigned on or before the 10th day of January, 1907.

JOHN BICKERSTETH,
Clerk to the Committee.

County Hall, Beverley.

THE EDITOR will, at all times, be glad to consider articles or sketches, provided that they are accompanied by the writer's name and address, not necessarily for publication. Payment is a matter of arrangement, and the fees that the GAZETTE *can offer are merely nominal, but if the writer desires any remuneration that fact should be stated.*

The "Darkie Prince."

A SMOKY brass lamp lit up the squalid room in a house in one of the many dreary back streets of a northern town. Amidst a jumble of dirty furniture, a horsehair sofa did duty as a bed. On it, huddled up in a confused mass of blanket, sheet and shawl, lay the wasted figure of a "coloured" baby. Beneath the black woolly head, with its great eyes staring into vacancy, was a stained pillow shedding its scanty feathers.

"A year old 'ee is to-day, doctor. 'Ee was born 'ealthy, not to say 'earty. 'Ee's 'ad the 'ooping corf two months ago, and now 'ee can keep nothink down since a week. My milk's no good to 'im anyway. I've tried biscuit, and that——"

"Will kill him if you give him any more," said the doctor, who was standing beside the tearful young mother—a fair-haired, fair-skinned Englishwoman.

"What can I give 'im, then?" she queried.

"Thin arrowroot water—as long as he lives."

"You think 'ee'l die, doctor?" There was such a note of pathos in her voice that the doctor felt sorry he had been so blunt.

"Well, well, I will do all I can for him, and then perhaps he——"

The sentence was not finished, for the morsel of dark humanity before them began twitching feebly and rolling up his sunken black eyes.

"Got a tub and warm water handy?"

The girl-mother vanished into the back room, and a few minutes later the convulsed infant was splashing back to consciousness.

* * * * * * *

The doctor sat in his surgery, writing up his visiting list for the following day. The sharp boy who answered the door, and did a hundred jobs for his master, ushered in a young woman of the working class. Before the doctor had time to wheel round in his revolving chair, she had spoken.

"'Ee's gone, sir—gone in another fit, and I've come for the sustificate."

"Ah," said the doctor, as he opened a drawer to get the certificate forms. While he turned over the sheets he glanced at the well-made girl beside him. Though dressed in shabby and badly-fitting clothes, there was a certain grace in her pose, and the keen eye of the doctor diagnosed correctly when he put the question, "Theatrical?"

"I was before baby was born," she answered.

"And your husband ——"

"Oh, no, 'ee aint 'is father. That was the 'Darkie Prince,' who played the mandoline in the café scene in the play we toured with."

"But surely you——." The doctor paused.

"Oh, 'ee was a regular musicianer, 'ee was," she continued. "Played anythink wonderful. Baby 'ad music in 'im, too. You should 'ave seen the little feller jump when an organ played in the street. 'Ee'd 'ave played 'isself if—— "

"Tell me," interrupted the doctor, "how came you to go on the stage?"

"Oh, I always wanted to. One day I wrote to an agent as advertised in the papers for girls, and I got an offer for the 'Freedom's Daughter' company—a sort of a Russian play."

"What kind of part did you have?"

"Oh, I didn't talk, not I. I was only a prisoner what groaned and fell down when the gaoler gave me a shove. But I stood up in the limelight for about five minutes before that," she said, with an air of pride, and the doctor looked at her admiringly as she threw herself into an attitude in which the lines of her splendid figure showed to advantage.

"But the 'Darkie Prince'?"

Her face saddened at the reference to her romance.

"Ah, 'ee was very kind to me then. Very kind then."

"And your husband now?" asked the doctor, still curious to hear further details of her story.

"Oh, 'ee's only a working man I know'd before I became a theatrical. We was married last Saturday." She mentioned the latter episode as though it was the most ordinary occurrence.

"And was he good to your baby?"

"Better than 'is father was. 'Ee never sent me no money; no letter even after I left the company and come to my sister's, who was very kind, an' took me in till baby was born, and Bill come along and asked me to marry 'im —yes, me and baby like."

"Bill must be a kind fellow."

"Yes, 'ee is kind, too."

"And the stage—you don't regret it?"

"No, not now," she said slowly, looking dreamily before her.

"They were kind to you?"

"Yes, they were all very kind."

"Well, well. I'm glad to hear it, and now I hope you will be happy in your married life. What's to pay? Oh, nothing this time. A wedding present, eh?"

"Oh, 'ow kind you are, sir. I'll go and tell Bill, outside."

When the door closed upon her, the doctor could not resist looking through the Venetian blind to see the man she now could call husband. The street lamp shone on the pair as they lingered near the house, while the woman recounted the latest act of kindness received. Her companion was a young workman of twenty-five—a broad, heavy-faced young man with a contented look. There was nothing romantic in his appearance. He was just a simple, honest man, who had come forward at the right moment to help her. They moved off and went down the street together.

"So they were all very kind," said the doctor, repeating her words. "Well, I'm glad I let her off the fee, poor girl."

Frederic Vicars.

Reviews.

The price of books submitted for review should in every case be stated.

A Short Practice of Medicine. By Robert A. Fleming, M.D. Pp. 748 and xx. (Messrs. J. & A. Churchill.) 10s. 6d. net.

We heartily agree with the author of this work, when he states in his preface, "that the writing of a new book on the Practice of Medicine demands an apology, or at least an explanation"; but we fail to see that he has justified himself in the text. Dr. Fleming considers that specialism has advanced to such an extent that it is no longer possible for a lecturer to cover the whole field of medicine, and he wishes his audience to come provided with a small text-book which will give general facts only and leave details and special points to be filled in by the lecturer. It must be very difficult, however, to draw the line between these two forms of teaching, and for the details no student will rely on his lecture notes—he will always read them in a book as well as in his notes, and not expect his lecturer to take the place of his text-book.

Our author also considers that he has presented a concise guide to all that is necessary for examinations—a belief in which we can hardly concur when we realise the numerous omissions. For instance, under Typhoid, no mention is made of periostitis or parotitis, nor are we told that the spots come out most characteristically in crops. Again, there is nothing to enable the candidate to answer that common examination question as to the differences between renal and splenic tumours. Lobar pneumonia is included among the specific infectious fevers—an innovation considerably in advance of ordinary examination teaching.

The Cases of Gastric Ulcer in which the Physician should seek the aid of the Surgeon.

CLINICAL LECTURE BY DR. HALE WHITE.

GENTLEMEN,—You will remember that the last lecture but one was upon cancer of the stomach, and the next was on hæmatemesis; so it seems only natural that to-day we should take part of the subject of gastric ulcer. And I do that because it so happens that we have admitted an example of it since the last lecture. I will briefly give you the notes of the case. The patient is a man æt. 28, and he is now in John ward. He came in for severe abdominal pain. He was treated at Guy's Hospital at Christmas time last year, and he has had attacks of vomiting since. During the past three weeks he has had discomfort half an hour after taking food. On the day of admission, while working, he was seized with a sudden severe pain in the epigastrium. That was at 12·30 p.m., and his last meal was taken at 11 a.m., an hour and a half before. He was given brandy, but the pain was not improved thereby. He passed a black motion two days before admission. On admission the pulse was 88. He looked fairly well, but had an agonizing pain in the epigastrium, with great tenderness all over the abdomen, which was rigid, moving very slightly on respiration. Nothing else was made out to be the matter with him. Two hours afterwards, it is important to notice, his pulse had mounted to 96. Local applications had not relieved the pain, and the abdomen was now quite rigid, whereupon the diagnosis was made of perforated gastric ulcer. The abdomen was opened, the ulcer found, just by the pylorus; it had ruptured, it was sewn up, and the man has done well since.

I think it always adds to the interest of medicine to find cases which occurred in years gone by. And only yesterday, while speaking about this lecture, it came into my mind that I might describe to you the case of a celebrated person. Quite a large literature centres around the cause of death of Henrietta, Duchess of Orleans. She was a daughter of Charles I., and was married to the Duke of Orleans, who was rather a fool, while she was an extremely clever woman, and had a large Court in France. The Duke was jealous of her. She died suddenly, and some accounts—though not the one I shall read you—on account of the acute pain in the stomach, said she had been poisoned. The English people took that up very strongly, and it nearly lead to a war between Louis XIV. and Charles the Second. Now, on reading the account, you will see there is a strong probability she had a perforated gastric ulcer; and now-a-days a chance of war would have been avoided, for the abdomen would have been opened, the perforation found and sewn up, and probably the life of the Duchess would have been saved. This, which I am going to read to you, is the account given by her maid-servant. There are many other accounts; for example, there is one in a very interesting life of her that was published only about eighteen months ago, and you will find another in the Memoirs of Count Gramont. The account is as follows:—

She had ailed for some time from pain in the stomach and side, but seemed to be otherwise in good health. One day after dinner she complained several times of pain. She drank some succory water as a stomachic, and, putting the cup down with one hand, with the other she pressed her side, and said in a voice that betokened much suffering, "Ha! what a stitch in the side; what pain! I cannot bear it." Speaking these words, she flushed, and a moment afterwards turned pale, with a wan lividity which astonished everybody, She kept crying out, and begged to be carried away, for she could no longer hold up. Supported by the arms of others, she managed to walk, but with difficulty, and bent double. Put to bed, she cried out more than ever that the pain in the pit of her stomach was past belief. She turned from side to side. A physician was fetched, who pronounced her complaint to be colic, and who prescribed suitable remedies; but the pain continued. She said that her suffering was greater than could be conceived, and that she would die. All this occurred in less than half-an-hour. Whatever she swallowed made her retch; she brought up only a little mucus mixed with food. The efforts to vomit and the excessive pain threw her into a state of exhaustion which resembled repose, but she told the bystanders not to deceive themselves, that the pain was as great as ever, and that she had no strength left to cry out. She heard someone remark that she was easier, and she said, "That is so far from being true, that were I not a Christian I would kill myself, so great are my sufferings. It is wrong to wish evil to anyone, yet I would that somebody could feel

for a moment what I feel, so as to know what my pain is like." Her pulse became imperceptible, her limbs cold. Her friends anxiously asked if nothing more could be done; they suggested a score of remedies, and at last her physician, in sheer desperation, made an attempt to bleed her, but the blood would not flow. They gave her some broth, for she had taken no food since dinner. She no sooner swallowed it than her sufferings increased. She complained that her stomach was filling up. Death was painted on her face. The last struggle was short, and after two or three convulsive movements about her mouth, she died nine hours from the beginning of her illness.

That is an extremely interesting case, and I think you will agree that it is very likely that the Duchess died of perforated gastric ulcer.

The hollow viscera which often perforate are the stomach, duodenum, the rest of the bowel—as, for instance, in typhoid—and the appendix; and you can only tell, when you have the patient before you, which of the viscera has perforated by observing first of all the locality of the pain; next there is, before the rigidity is universal, localised rigidity over the seat of perforation, and the third point which helps you is the history. If the patient has had typhoid fever, you assume that it is a typhoid ulcer which has perforated. If, as in the case of the man in the ward, there is a history of gastric ulcer, you assume it is this which has perforated; if there is a history of appendicitis, you assume that the appendix has perforated. I want you to remember that, except for localising symptoms and the history, the symptoms of perforation are the same, wherever the perforation may be. I hardly know whether you ought to call a ruptured extra-uterine fœtation a perforation of a hollow viscus; that is a mere matter of words, but never forget the possibility of it. It is such a fearful mistake to overlook it—ghastly. If you overlook it, the woman may lose her life. But I think you will usually be led to a correct diagnosis of that if you notice that because of the excessive bleeding she is very blanched; and when you inquire into the history you will generally find there has been two or three months' amenorrhœa, or some other sign of pregnancy, to help you.

Returning to the case now in John, I must point out to you how you will recognise when a gastric ulcer has perforated. The first thing you will remember is—it was so in this man, and it was so in the Duchess of Orleans—that sufferers from a perforated gastric ulcer complain of a sudden sharp pain in the abdomen. It is altogether exceptionally sharp—it is agonising. In the man's case it was so bad, that within an hour or two of it coming on he was in the hospital; and in the case of the Duchess she called out almost at once, "What a pain! I cannot bear it." It is probably a greater pain than anyone here has ever suffered. Now, there are some exceptions to that. If the patient is very debilitated as a result of long illness he cannot feel pain readily, for to feel pain the nervous system must be more or less in a state of good nutrition; and if the patient is almost moribund he will not feel the pain. So, for instance, when malignant ulcer of the stomach perforates, frequently no pain is experienced, and the perforation is not found until the post-mortem. But in a healthy or moderately healthy person you may always expect the pain which follows perforation of the stomach or bowel to be excessively severe.

Then there is collapse. The man was so knocked over by the perforation that he was given brandy at once, but that did not make him feel any better. You will remember how collapsed the Duchess of Orleans was. She turned pale, with a wan lividity which astonished everybody. I want you to realise how much more severe the symptoms of perforation usually are than are those of any ordinary stomach-ache; the pain is so severe that the patient at once seeks medical advice. We do not often see here patients suffering from a perforated gastric ulcer who have not quickly sent for a doctor. I suppose all of us have had stomach-ache at times, but probably not bad enough to lead us to send for a doctor at once, and not bad enough to make us lie down, but usually the sufferer from perforation has to lie down. This man had to leave off work at once. The pain is often so bad that the patient will cry out. It is felt in front of the abdomen, and usually somewhere near the site of the perforation. The features are drawn, and this is very suggestive of severe abdominal disease. The pulse is usually small, and hour by hour mounts in rapidity, and the temperature, even an hour or two after the accident, is usually low. There is often a cold, clammy sweat, because of the collapse. And you should remember that the patient remains conscious during the whole time. Abdominal rigidity increases, and it frequently becomes so marked that the abdomen is strikingly retracted, owing to the contraction of the recti. The rigidity is often specially marked over the seat of perforation. Respiratory movements seem to increase the pain, hence

there is shallow breathing. Sometimes these patients are sick, and there is considerable tenderness. And I want you to remember that the whole illness is very severe.

But to-day I am lecturing only on the treatment of gastric ulcer, so I will not describe in detail the symptoms which are seen a few hours after perforation, and follow those just mentioned. When an ulcer has perforated, the patient ought to be treated as soon as possible after perforation. If he is not treated, the symptoms go on, and become those of peritonitis. It is extremely difficult to draw the line, and say where the symptoms of perforation end and those of peritonitis begin. They merge into each other; the abdomen becomes distended, for there is paralysis of the bowel, owing to peritonitis, the temperature begins to mount again, the pulse becomes more rapid, and the blood shows a considerable leucocytosis, even at the end of a few hours; the patient becomes more sick, and there is general peritonitis.

If you see the case late, all you can say is that the patient has got general peritonitis, and often you can only tell by the history what has been the cause of it. But if you see the case early you will be able, merely from the look of the patient and from the local rigidity and pain, to diagnose that the case is one of perforated viscus.

You are taking a great responsibility when you advise a patient to have his abdomen opened, but fortunately when you are in error as to perforation, the condition existing is usually one for which the abdomen should be opened. For supposing we mistake the case for one of acute obstruction of the bowels, there again the only thing to do is to open the abdomen. Or suppose we mistake it for non-perforating peritonitis, there again, in many instances, the only thing to do is to open the abdomen. And those are the conditions most likely to be confounded with perforated gastric ulcer. A twisted ovarian pedicle sometimes gives rise to great difficulty in diagnosis, but that is very rare.

But now I come to a mistake which you are likely to make, and which is a very serious matter for the patient. An abdomen has been opened under the impression that the patient has got acute peritonitis of some form, only to find that he has got nothing but pneumonia. I think that mistake is liable to be made when the pneumonia is at the base, and the diaphragm is early involved, and its movement restricted. The diaphragm is then often exclusively painful, the patient has a sudden severe pain, you look at the abdomen and find it does not move, and you are liable to assume that there is acute peritonitis, possibly due to perforation of a gastric ulcer. Operation is then done, only to find that the abdomen is healthy and the whole trouble is in the chest. You ought generally to be able to avoid that mistake, and one of the best guides is to notice the respirations. In pneumonia they are more rapid than when the trouble is primarily in the abdomen. Moreover, as a rule, the sufferer from pneumonia is not so collapsed as the abdominal case.

Another condition which it is very desirable to separate off from perforative peritonitis is acute pancreatitis. Unfortunately we often fail; consequently cases of acute pancreatitis are often operated upon. I am sorry to say we have no evidence that acute pancreatitis gets well, so perhaps operation is not to be so much regretted, for the patient has been given the chance that his symptoms were due to a perforated gastric ulcer. Last time I took Clinical we did not ask a surgeon to see a case, because we felt that it might be left. And we were glad we did not ask him to see it, because the post-mortem showed that the patient had acute fat necrosis all round the pancreas, not perforative peritonitis. What guided us most was that the patient rallied quickly from the sudden onset, and after two days' comparative comfort she got ill again and quickly died. It is a fearful mistake to omit to operate upon a patient with perforative peritonitis. When you are in doubt, I recommend you to consult with a surgeon, with the view of the abdomen being opened. It is happily very rare for cases of hysteria to simulate perforative peritonitis, and I can only advise you to be very careful at the bedside and go over the case thoroughly. Generally in hysteria the abdomen will not be locally rigid, or the woman will not be ill enough to lead to a mistake, or the pulse will not mount hour by hour. One thing which will help you very much is to take the blood-count. Leucocytosis shows itself very early in perforative peritonitis, and few conditions show a higher degree of leucocytosis.

If you think that a patient is suffering from perforation of a gastric ulcer, whatever your engagements are, or whatever your appointments, they must be put off; everything else must give way to getting that abdomen opened as quickly as possible. Every hour you wait increases the risk of death by 2 per cent.; so if, after the diagnosis is fairly certain, you wait three or four hours, you will have been

unfair to your patient. Listen to these figures: Operated upon less than 12 hours from onset of perforation ... 28·5 per cent. fatal. Ditto from 12 to 24 hours after, 53·6 per cent.
" " 24 to 36 " " 87·5 "
" " 36 to 48 " " 100 "
So you see it is an awful responsibility not to act promptly when once the diagnosis is made, but no cases require more care in diagnosis. Remember that the causes of abdominal pain are many; it may occur in lead colic, or renal or biliary colic, and many other conditions for each of which it would be a very grave mistake to have opened the abdomen.

Next to perforation, the acute condition that is most striking in gastric ulcer is severe hæmorrhage. I can give you a few rules for dealing with that. Never operate to stop hæmorrhage during the hæmorrhage. The reasons for that are, the mortality of sudden severe hæmorrhage in gastric ulcer is very small. It is often very difficult to secure the bleeding vessel; I have seen a surgeon totally fail. Supposing it is a large fibrous ulcer exposing the viscera at the back of the abdomen, as it often does, what is the chance of the surgeon being able to arrest hæmorrhage from a bleeding vessel in a mass of fibrous tissue at that situation? Next, all patients who are profoundly anæmic from loss of blood bear operations badly. As I told you in the last lecture, many patients who are thought to have gastric ulcer because of hæmatemesis have not got ulcer at all. So although it may be very depressing for you to have to stand by and see a case, as you think, die from want of surgical treatment, when there is bleeding from a gastric ulcer, I think you will always give that patient the best chance of recovery if you do not open the abdomen. You may ask what are you to do? Keep the patient quietly at rest in bed, don't give any food, but give local styptics. In years gone by I used to give a drachm of liquor ferri perchloridi with a drachm of glycerine every two hours. Do not use tincture, because the alcohol which it contains might accelerate the bleeding. Iron is nasty to take, but is a powerful styptic, and may help to stop the bleeding. Perhaps now it is preferable to give 5 or 10 minims of 1 in 1,000 solution of adrenalin every hour or two a trial, because if it came into direct contact with the bleeding vessel it would constrict it, and as adrenalin is not absorbed from the gastric mucous membrane, no evil effects will follow. You can give the patient 10 grains of calcium chloride three times a day by the mouth, with the hope of increasing the coagulability of the blood, but do not transfuse with normal saline unless it is absolutely necessary, because by so doing you will raise the blood pressure, and possibly dislodge a clot from a vessel which is plugged.

I need not delay to tell you anything about the treatment of another complication of gastric ulcer, namely, subphrenic abscess. It is obvious that the abscess must be opened.

Now we come to the more chronic results. You know that when an ulcer heals it frequently forms adhesions to the surrounding parts. And these adhesions often give rise to pain. Probably the pain is most evident when the adhesion is between the stomach and the bowel, because then every movement, whether of the stomach or of the bowel, drags upon the adhesion and causes pain. I do not know why, but often the pain of these adhesions is chiefly paroxysmal, and it may be very severe. Sometimes there is slighter constant pain in between those attacks, but often this is entirely absent. The patient may or may not suffer from indigestion. If he has this to a striking degree as well as the pain, he loses flesh, and becomes weak, miserable, and wasted. If the patient be a woman and is not wasted, many of her symptoms may be put down to neuralgia, hysteria, and all sorts of uncomplimentary diagnoses. I have known a woman treated for twenty-five years as the subject of hysteria, when the cause of her trouble was adhesions inside the abdomen; and after two operations designed to get rid of these adhesions she got well, and is now enjoying life, whereas she was previously bedridden.

Usually the pain due to adhesions has continued too long for you to suspect malignant disease, and careful examination generally enables you to put aside floating kidney, and biliary or renal colic. There will be a history of gastric ulcer to guide you as to the cause of the pain, and sometimes you can feel a mass of adhesions in the abdomen. It is clear that no drug will get rid of them. I do not suppose that the most enthusiastic devotee of materia medica would think of trying to get rid of adhesions outside a gastric ulcer by means of medicines. But you must not jump to the conclusion that if you take the adhesions away the patient will necessarily get well. Many of these patients are women, and long-continued pain and discomfort in a women seems to so undermine her nervous system that she gets a good deal of pain superadded to that originally caused by the organic disease. Look at the extreme pain arising from misplacements of the uterus, or that associated with floating kidney. And if this superadded pain has, so to

speak, become stamped upon the woman's individuality, you do not always get rid of it when you remove the mechanical cause. Let me tell you of a case which illustrates this. A woman came into Miriam with pain due to adhesions connected with the stomach. These were removed and her pain was relieved. She then went home to her native village, and the kindly commiseration of her neighbours soon led to a return of the pain. She came back to Miriam, and the mental discipline of that ward soon caused the pain to disappear. Take as a contrast this case, in which all the pain was due to an organic cause. The patient was an engineer, who was prevented from earning his living by the severity of his pain. His adhesions—which were due to a gastric ulcer—were removed many years ago, and he has never had any return of pain. In many cases, unfortunately, the adhesions cannot be removed, and even if they are, they return; therefore, often the best treatment for these cases is to do a gastro-jejunostomy.

You will meet with sufferers from gastric ulcer who often vomit blood, with the result that they are anæmic and out of health; in such, too, gastro-jejunostomy is of great service, but remember what I have already told you, never operate during an attack of hæmorrhage.

The cases which do best after gastro-jejunostomy are those in which cicatrization of an ulcer at the pylorus has led to dilatation of the stomach. If the dilatation is extreme, the patient is usually a thin, weak, miserable, dyspeptic individual, who is unable to work properly, but after gastro-jejunostomy he gains weight and soon becomes quite well. I have known members of our own profession quite unable to do their work until they had a gastro-jejunostomy; after it their vomiting ceased, they gained weight, and now work with comfort. You remember a man in Addison with a dilated stomach due to a cicatrized ulcer. He used to vomit the enormous quantity of two quarts at a time; he was quite unable to work. Sir Alfred Fripp did a gastro-jejunostomy, and his gastric symptoms have quite disappeared. Mild degrees of chronic dilatation may be cured by lavage, but extreme chronic dilatation is almost always due to pyloric obstruction, and can only be relieved by gastro-jejunostomy.

As tetany is one of the results of gastric dilatation any operation for tetany is the same as an operation for gastric dilatation.

There are some general propositions which apply to operation for any of the results of gastric ulcer, and which must be borne in mind. No operation is quite free from risk; even in the 1905 edition (American translation) of von Bergmann's System of Surgery it is stated that the mortality in Mikulicz's clinic among the last 40 patients operated upon for benign affections of the stomach is 7·5 per cent., but, on the other hand, the mortality is decreasing. Paterson (1906) puts it down at 3 per cent., but judging by the results obtained at Guy's, it has hardly yet reached nearly so low a figure. Anyhow, the patient must always be asked whether he prefers to take the risk or remain as he is. We can hardly ever say to him—unless perforation has occurred—if you remain as you are your ulcer will almost certainly kill you. Next, we must remember that some patients suffering from chronic ulcer are not relieved by operation; it may be that adhesions cannot be divided, or that even when a gastro-jejunostomy has been done pain and even bleeding may continue. Unfortunately, there is no means by which we can tell beforehand whether or not the patient will be relieved, but great relief follows operation sufficiently frequently for us to be able to say to a patient, for whom medical treatment has failed, that there is a very considerable prospect that he will be much better after an operation. In a few cases a peptic ulcer in the jejunum follows a gastro-jejunostomy, but these cases are so few that they need hardly influence us much in the advice we give, especially as it will be impossible during life to say whether symptoms are due to the persistence of those of ulcer or the formation of a peptic ulcer in the jejunum; and further, if Paterson's suggestion is correct that a jejunal peptic ulcer is due to hyperchlorhydria, which is itself due to an insufficient anastomotic opening, jejunal peptic ulcer ought to disappear with improved methods of operating, which will also probably get rid of the regurgitant vomiting which occasionally follows. I think the evidence is conclusive that the metabolism of the body is not appreciably altered by a gastro-jejunostomy, and even if there is a trifling diminution in the absorption of proteid this may be a blessing in disguise, for it seems that most of us habitually take more proteid than we require. I have been at considerable pains to look through the literature of the question as to whether a growth is particularly liable to develop upon an ulcer, and also I have looked at many specimens. I have not been able to convince myself that any such liability is serious, and, at most, it is so slight that it need not weigh with us in considering operation. The greatest difficulty in

deciding whether to operate lies in the uncertainty of diagnosis. No statistics from operations are of value unless the surgeon at the time of operation has seen the ulcer, or a considerable mass of adhesions originating in the stomach, or great dilatation of that organ. Numbers of young adults who would twenty years ago have been said to have an ulcer have not got one, they are examples of gastric oozing or gastrostaxis as it may be called, but as this condition is commonest in young subjects and in women, it follows that we are most likely to be correct in our diagnosis of ulcer and therefore most likely to do good by operation if the patient is a man and over thirty years of age. Even if there is an ulcer and the patient is a woman, probably the likelihood of improvement is less than if the patient is a man, for in women many neuroses that operation may not benefit are liable to be added to the symptoms of organic disease. We should, I would suggest, be very chary of operation—apart from that for perforation or abscess—without definite evidence of bleeding, because if there has been none it is quite likely that the case is one of neurotic dyspepsia, for this often cannot with certainty be diagnosed from gastric ulcer, and all experience shows that operation upon the stomach for gastric symptoms not due to ulcer or growth does no good, and even makes the patient worse. Still, I think we may sum up by saying that if we use our judgment wisely in selecting appropriate cases we save an immense amount of suffering and restore many invalids to health by doing a gastro-jejunostomy for some sufferers from gastric ulcer. But, happily, there are many cases which do not require this operation. I had hoped to tell you this afternoon how to treat them, but as time is up I cannot, and must reserve that for another lecture.

Papers by Guy's Men.

Urinary Excretions in Bright's Disease. By F. A. Bainbridge, M.A., M.D., D.Sc., M.R.C.P.—*The Practitioner* for December, 1906.

Intussusception in Infants. By C. H. Fagge, M.S., F.R.C.S.—*Ibid.*

Cancer of the Stomach. By W. Hale White, M.D., F.R.C.P.—*Ibid.*

A Case of Lepra Tuberosa; Treatment with Chaulmoogra Oil; Approximate Recovery. By J. Ashburton Thompson, M.D., D.P.H.—*The Lancet*, 1st December 1906.

The Story of Astley Cooper.

Astley Paston Cooper, destined to be one of the greatest of English surgeons, was born on the 23rd of August, in the year 1768, at Brooke Hall, about seven miles from Norwich city. He was the fifth son of the Reverend Samuel Cooper, D.D., curate of Great Yarmouth and rector of Morley and Yelverton in the County of Norfolk, and the seventh in a family of eleven children. His father, "a slightly pompous but most urbane gentleman," was a scholar of no mean reputation, a voluminous writer, contributing largely to the "Gentleman's Magazine," and an indifferent poet, whose egregious piece of work entitled "The Task," led Dr. Parr to write that epigram which is well enough known to critics of the present day. His mother, a Miss Bransby, was a woman of kindred tastes. She wrote stories and romances with a certain amount of skill and a knack of characterisation which it is astonishing to find did not win her work a wider appreciation than it has hitherto received.

Astley's boyhood was spent at Brooke Hall, the residence of his father. The Coopers were well off and entertained largely, and before his tenth year young Astley had seen, and listened to the conversation of, many of the eminent men of the day who were visitors at his father's house. His uncle, William Cooper, was senior surgeon to Guy's and St. Thomas's Hospitals, and his grandfather had attained some eminence and reputation as a surgeon in Norwich city itself. The former made periodical journeys to Brooke Hall, where he relaxed the severity of his countenance—which had passed into a proverb among his dressers—to relate funny stories to his nephew, and applaud the latter's misdeeds. For the boyhood of Astley, contrary to copy-book expectations, is a long record of the most outrageous escapades and wanton mischief that any great man can lay claim to. Clive climbed the steeple; Cooper not only achieved the same distinction of emulating the "Devil on the Strasburg spire," by ascending the steeple of his father's church in Norwich, but added to his notoriety by distributing the contents of two feather pillows to the winds from that post of vantage. Tradition, which in after years he was fond of repeating, tells how it rained swan's feathers and goose down in the Norwich cattle market that morning, and how speculation became rife on the causation of this extraordinary and unnatural phenomenon, so much so, in fact, that one learned gentleman thought fit to write an epitome of the event for the delectation of the Royal Society—a record which is, unfortunately, not to be found in the Philosophical Transactions. Bransby Cooper has been at some pains to collect evidence of his uncle's pranks, and tells the various episodes with a naïve simplicity and an utter absence of any sense of humour that cannot fail to impress the reader with his impartiality. There is no space to give a tabulated list of these crimes and misdemeanours of boyhood. A few instances, besides the

spire adventure, must suffice. Thus we are told that the youthful Astley, who was a pretty boy, slight of figure and delicate of wrist, heard that there lived, near Brooke Hall, a "gentleman whose wife was imbecile, and who was in the habit of taking unbecoming liberties with his maid servants." Young Cooper dressed himself in his sister's garments, borrowed for the occasion without her consent, and went to seek an engagement as "parlour-maid" with this gentleman of doubtful reputation. His chubby face and engaging air obtained him immediate employment, and his employer proceeded to ratify the contract in his usual way—when his wife was not present—by kissing the newly-engaged parlour maid, whereupon Cooper burst out into a loud laugh, revealed his identity, and declared his intention of holding his neighbour up to ridicule—a threat which his father nipped in the bud by forbidding him to speak on the subject. Astley's tutor was a man "of parts and ripe knowledge of the classics," a Mr. Larke, who appears to have been a mild-mannered, smooth-spoken gentlemen with little strength of character. "He was subject," says Bransby Cooper, "to an infirmity which rendered him easily manageable by those who were aware of the circumstances; this was such an unusual degree of nervous susceptibility that when he received a slight blow on the pit of his stomach, he was for a time deprived of the power of respiration — a circumstance of which his refractory scholar did not omit to avail himself on certain occassions" (Bransby Cooper's "Life," p. 45).

Notwithstanding the fact that he had undeniably good opportunities for improving himself, Astley Cooper does not seem to have made much progress in his education. He learned to write and read, and obtained a slight knowledge of Latin, but, like his great predecessor, Hunter, he reached his sixteenth year without having acquired a tithe of the knowledge that the average young man of his day could lay claim to. In a measure his excuse lay in the fact that he was constitutionally delicate. He had been brought up, like Pip, "by hand," having been given into the care of a foster-mother, as his own mother was not able to suckle him. In his early boyhood he was encouraged to devote himself to outdoor sports as much as possible. Afterwards he needed no encouragement. He became the acknowledged leader of the boys in his neighbourhood, foremost in orchard raids, and first in any adventure or prank that presented itself. When he was twelve years of age he possessed a cob of his own, which he trained to undertake the most foolhardy leaps. One of these was to jump over a cow as she lay chewing the cud beside a hedge. For a time the cow submitted patiently to the indignity, but at last it got on her nerves, and she rose to her feet at the critical moment, and sent the cob and rider sprawling against the fence. This attempt cost Astley a broken collar-bone, and an edict was issued against such attempts in the future.

When he was in his sixteenth year Astley decided to enter the medical profession. This decision was not made hastily, but after due consultation with uncle William, who came down specially from Guy's to interview his nephew on the subject. On more than one occasion Astley had displayed remarkable courage, and, according to his biographer, the event that made him think of becoming a surgeon was a grave injury to his elder brother, who chanced to cut his arm at the wrist, severing the radial artery. Everyone stood helplessly looking on, and it remained for the younger brother to tie a cravat round the forearm and so control the bleeding. The incident was duly related to uncle William, who thought that Astley should have a further probationary experience. He was accordingly sent to witness an operation for the stone. This ordeal, trying enough it must be admitted, he endured with exemplary calmness, and uncle William took him on as apprentice.

So Astley came to Guy's Hospital, and commenced, as Keats had commenced, as a dresser in the wards. At his own request, however, he left his uncle to attach himself to surgeon Cline, a man of wide learning, singularly open-minded and liberal in his views, a sound teacher, but lazy and indolent, and somewhat timid as an operator. He lived in Cline's house, in Jeffrey Square, St. Mary Axe (now a warehouse), and spent his first year at Guy's in a manner that roused his uncle's wrath and called forth vigorous expostulatory letters from his parents. He rarely attended lectures, but joined himself to a rollicking set, and indulged in various pranks which, though innocent enough in themselves, were hardly looked upon with favour by the strict and dignified William Cooper. On one occasion he borrowed a sub-lieutenant's uniform, and masqueraded round Piccadilly, meeting, to his consternation and disgust, his uncle William, accompanied by another member of the staff. The senior surgeon, who thought he recognised his nephew in that strange garb, went up to him, and at the top of his voice "lectured him severely for his folly and presumption in so wasting his time." Astley, however, determined to brazen the thing out. He bowed gravely, and looking his uncle firmly in the eyes drawled out, "Gad, sir, what damned nonsense are you talking? I have not the honour of your acquaintance, and you doubtless mistake me for someone else. Under the circumstances I will overlook your impertinence. My name is ——" mentioning a fictitious name and the regiment whose uniform he wore. His uncle was completely taken aback, apologised profusely, and went home under the impression that he had misjudged his nephew.

Soon after his entry into the hospital, Astley was proposed as a member of the Physical Society. This ancient circle was then subject to laws much more vigorous and drastic than those that now obtain. On the books of the society occur various mentions of his name—not always such as reflect credit upon him. We know, for instance, that he incurred repeated fines for non-attendance at the meetings, for leaving the meeting without the consent of the president, and for interrupting. A break occurred when he went to Edinburgh. Here he studied for a short time under Gregory, Cullen, Black, and Fyfe—teachers for whom, in after life, he entertained

a high respect and veneration. When he came back to London he resumed his work with Cline. The old surgeon, who seems to have exercised a much better influence upon the young man than did the impulsive and strict William Cooper, devoted much of his time to Astley, and so effectually exerted his influence that the latter turned over a new leaf. He became diligent in his attendance at the Physical Society's meetings, rarely missing a meeting, and working assiduously at his paper, which in accordance with the rules of the society, every new member was bound to read within eighteen months of his election. He chose for his subject "Cancer of the Female Breast," and threw himself heart and soul into the work of dissecting, noting, and comparing specimens.

From this period his life is an altered one. He worked steadily and earnestly and his marked ability soon attracted attention. He became an unofficial demonstrator in the dissecting-room, helping the juniors in their work, and working hard himself. In his spare time he attended Hunt's lectures and dissected "everything he could lay hands on." When he was twenty-one years of age Cline appointed him assistant demonstrator of anatomy at St. Thomas' (which was then the anatomical school for Guy's men), and in 1792 he advanced a step further and was appointed joint lecturer in surgery. The previous year he had married, his bride being Miss Annie Cock, who brought him a dowry of £10,000. The following year he went to Paris, armed with introductions from Cline, who was a hearty revolutionist, and, like Burke, regarded the coming French revolution as the dawn of a brighter and happier era for mankind. At Paris he took humble quarters with his wife, and spent his time in studying under the great French surgeons, Chopart and Desault. Here he saw much of the awful realities of the revolution—the ignominious escortal of Louis XVI. and the Queen to the Temple by an infuriated mob—the beginnings of the Terror—the ghastly processions of heads on pikes passing under his window—the rise of Robespierre, and the tragedy of the Rolandists. In his journal and letters occur frequent references to the incidents which attracted, fascinated, and at the same time repulsed him. He worked assiduously at the Hotel-Dieu, protected by his known communistic opinions, by his practical sympathy with the wounded revolutionists, and by the popularity of the charitable Chopart, against whom even the most vehement of the Terrorists could lay no charge. But in time the strain became intolerable. His wife was nearing her confinement, and his English friends in Paris had all flocked away. Cooper applied for, and obtained, a passport and returned to England—a wiser man, both in his knowledge of surgery and of men, a sadder one because of his aquaintance with the worst side of the golden shield that Cline, Thirlwall, and Paine had held up for his admiration.

From 1793 to 1796 his life at Guy's was one of strenuous exertion and daily drudgery. He continued to live with Cline, but a change seems to have come over their relations. The elder man became more lazy and indolent, leaving his work to his eager young colleague, and helping the latter as much as he could with advice. Through Cline's influence, Cooper was appointed lecturer on anatomy at the Royal College of Surgeons, a post which he held for four years. When a daughter was born to him, he removed to 12, St. Mary Axe, a house which no longer exists, and here, for a long time, he carried on his practice, which was steadily rising. He built himself a private dissecting-room where he dissected fish, such carcases as he could obtain from the adjacent Tower Menagerie, and such bodies as he could buy from the Resurrectionists. From this time dates his connections with that notorious set of criminals of which Bill Crouch was the acknowledged leader. Cooper never seems to have troubled himself to examine his own position with regard to the matter. He admitted that he was infringing the spirit, if not the exact letter, of the law, and he shielded himself behind "necessity," the "tyrant's plea." "There is no other way of getting material," he declared before the Royal Commission, and then, in a burst of half petulant boastfulness, "I can get any body I like if I wish to pay for it. No matter what manner of man he was, or how securely buried, if I want his corpse to dissect I can manage to obtain it." When he could not get human bodies he dissected animals; the mounted skeleton of the Indian elephant, now in the Museum of St. Thomas' Hospital, was prepared by him and a band of enthusiasts from the dissecting-room at Guy's, and he made a careful dissection of the viscera of the animal.

Nor was he backward in his attendance at the hospital, or in putting to practical use the hints he had gathered from his study on the dead body. He continued his lectures on surgery, and took round the junior students on certain days. In 1800 his uncle, William Cooper, resigned, and on Cline's advice Astley applied for the vacant post. Three other candidates were in the field, two of them being Guy's men, while the third was an outsider. Cooper's candidature was vigorously backed up by his uncle, by Dr. Marcet, and by the eccentric "Calomel" Curry (who, tradition has it, sprinkled powdered calomel on his beef sandwiches, and took calomel in his coffee), but the rest of the staff did not look upon him with favour. Cooper was regarded as a "dangerous man," dangerous, politically, because he held opinions which clashed with the generally accepted opinions of the day. He was referred to as the pupil of the democrat Cline, the follower of "the atheist Paine," and the proselyte of "the perfidious Thirlwall." So high, indeed, did the staff resent his candidature that Mr. Treasurer Harrison sent for him privately and intimated that there was no possible chance of his success unless he abjured his political opinions. Fortunately—or unfortunately, according to the reader's point of view—Cooper had no great difficulty in doing that. Perhaps the outrages at Paris had sickened him of socialism as it was then understood; perhaps the bait that Harrison held out was too dazzling to be

withstood by one who had his foot on the first rung of the ladder; perhaps, also, he had never been thoroughly enthusiastic in his agreement with Cline. The fact is, he "convinced me," says Harrison, "of his fitness," and he appears to have been equally successful with the staff. At any rate, he obtained the post, being appointed surgeon to the hospital. His recantation cost him the friendship of his old master, Cline, but it gained him many new friends, and it seems that, on the whole, he preferred his new allies. He became highly popular with the students, and persuaded them to establish a Dressers' Clinical Association (somewhat on the lines sketched out by Mr. Symonds in his opening lecture on surgery), of which Travers became the first secretary. This society does not seem to have existed long, although there was—and still is—undoubtedly room for it.

In 1802 Cooper gained his first great success, outside the hospital, by being elected a member of the Royal Society. A year previous he had forwarded to the society a paper containing "Remarks on the Membrana Tympani," in which he had sketched out the operation for perforating the drum in cases of deafness. This gained him the Copley medal, with the additional distinction of being the youngest scientist to whom this mark of the society's appreciation had ever been awarded. In 1805 he took part in founding the Medico Chirurgical Society, of which he was the first treasurer. He contributed various papers to its transactions, and in the same year published his first work on hernia, in two volumes, with excellent plates, the cost of which, however, was so high that it left him a thousand pounds out of pocket when all the copies of the first edition had been sold. The next year he removed to a large house in New Bond Street, and from that time his practice increased by leaps and bounds. He was reputed to be making £21,000 a year soon after his establishment in Bond Street, and to some extent his success was helped by the assiduous care of his *factotum*, "Charles." The latter was a character in his way, and became an autocrat in the house. When Cooper's practice became large, Charles exercised a careful vigilance over the patients. If a servant called in hot haste with a message, "Will Doctor Cooper kindly come at once to Lord So-and-So," Charles would look gloomy and stern, and "objectionably calm." "I am not at all sure," he would say, "if we can attend to-day. Our list is quite full and we are excessively busy, but if you will wait, I will see what we can do for you." As may readily be imagined, Charles made a good commission on patients.

In 1813, Cooper was appointed Professor of Comparative Anatomy at the Royal College. Two years later he removed to New Street, Spring Gardens. In May of the same year he performed his celebrated operation of tying the abdominal aorta—an event which is, or ought to be, so well known to Guy's men that it need not be dilated upon. In 1820 he was called upon to attend George IV., who was suffering from a tumour of the scalp. After some delay he undertook to remove the tumour, and the operation was safely performed. The King stood it well, and enquired what kind of tumour it was. "A steatome, sire," replied Cooper, in a voice of deference which would have aroused the indignation of Cline and old Doctor Marcet—the only member of Guy's Staff who could boast of having suffered imprisonment for his political opinions. "A steatome, is it?" said the King. "Well, let it stay-at-home, and be damned to it"—a pun which Cooper records with as much delight as if it were the quintessence of Rabelaisian wit. For this operation, or, as Clune would have said, for his subserviency to royalty, Cooper was awarded a baronetcy, with, at his own request, an entail in favour of his nephew, and was appointed surgeon to the King's household. In 1822 he was appointed examiner at the Royal College, and in the same year he published his great work on fractures and dislocations. In 1825, when the split between Guy's and St. Thomas' occurred, he left the latter hospital and founded the anatomical school at Guy's. In 1827 he was elected President of the Royal College, and a year later was appointed surgeon to the King. In 1827 he lost his wife, and retired for a time to his country house, where he occupied himself with agricultural pursuits. In the following year, however, he married again, his bride being a Miss Jones. With her he went for a long trip to the Continent, visiting most of the German and French hospitals. In 1836 he was re-elected President of the College, and again threw himself into the arena of practical surgery. For four years he practised, rarely missing a day's work at the hospital, coming down on Sunday mornings to go round with his class, and taking a keen interest in his clinical work. But his health was failing, and in January, 1841, he called upon Dr. Bright. On Dr. Bright's advice he took to his bed. His illness was short, and it soon became evident that he was dying. His last words were addressed to his nephew and to Bright. Turning to the one he said, "Kiss me, Bransby," and then to Bright. "You must excuse me, but I shall not take any more medicine." He died on the 12th of February, 1841, aged 73 years.

At his request, expressed during his last illness, and reiterated in his testament, a post-mortem examination on his body was made. A full report of it appears in Guy's Hospital Reports, vol. xii., where the curious may study it. By his will a sum of money was left to the Hospital to found the Astley Cooper Prize.

In summing up the character of the man, one has to bear in mind the fact that Astley Cooper was a self-educated man, and that he had all the failings and all the virtues that generally belong to an individual of that class. He possessed energy, the methodical grinding power which pulverises obstacles by constant and unwearying attention to detail rather than by sudden and exuberant flashes of brilliancy, a quick, active mind, self-reliancy, and physical courage; he was generous, liberal and tolerant. When Read, the poor gardener, who had invented the stomach pump and had been jeered at by the profession generally, came to him as a last resource, Cooper listened attentively, readily grasped the merits of the new invention, and financially and practically helped

him. Equally spontaneous and cordial was his assistance of the struggling artist Canton, some of whose pictures are still to be found in our Museum. His consideration for the feelings of others was carried to extremes at times. He objected to performing the operation on the King because he considered that it was the privilege of the Sergeant Surgeon to do it, and he resigned his office as surgeon to St. Thomas's because he thought that the Governors of that institution had slighted his nephew. As an operator he was skilful, quick, and in some respects original, though his originality was really the result of careful and long-thought-out experiment. Thus he practised the operation of tying the aorta several times on the dead body before he carried it out on his patient. He did much for Guy's Hospital; perhaps, in a sense, he did more for the profession, for he gave the surgeon a social standing, and he undoubtedly raised the tone of his class and won for the operator a recognition such as no other surgeon, not even the brilliant Hunter, had succeeded in obtaining. Nor should one forget, in this enumeration of his good qualities, the influence which he exercised on younger minds. The list of Guy's men whom he befriended, helped and assisted is a long one, and as "Appollonius, my trusty seer and guide," it is possible that he is immortalised in Keats' poetry.

On the other hand is the catalogue of his failings. It is sometimes wise to see what view an outsider formulates of our heroes, as it is sometimes useful to find what the heathen think of our divinities. M. Dureau, whose excellent epitome on Cooper in Raice-Delorme and Dechembre's monumental Diction. Encyclop. des Sciences Médicales is well worth reading, has summed Cooper up in a few words which will bear repetition. "Il était alors le Dupuytren de l'Angleterre. Mais, avec de très grandes qualités d'observateur, de professeur, d'opérateur on lui a reproché son indifférence pour les travaux de ces devanciers. Malgaigne a insisté sur ce défaut capital du grand chirurgien anglais, qui pour cette raison a laissé un grand nombre d'ouvrages en réalite inachevés, ou des observations peu nombreuses ou insuffisantes, parce qu'il n'admettait que les siennes . . . . Cooper ne se soucie pas davantage de ses contemporains. Mais à part cette grave imperfection, dont se ressentent surtout ses écrits, Astley Cooper est neammoins l'un des plus grands chirurgiens de l'Angleterre."

Like Hunter, he was no scholar in the narrow sense of the term. His knowledge of the classics was confined to a few common quotations: his acquaintance with the literature of his own country was rudimentary. Nor was he skilled in French or German, and his reading was rarely carried beyond the bounds of the London medical papers. Perhaps he believed, with Napoleon, that "the desire of perfection is the worst disease that ever afflicted the human mind," but, unlike Napoleon, he had a fine regard for those who were better educated than he was. "If you want to get on," says an Italian proverb, "take care that you are not too good," and Cooper was sufficiently aware of the truth of the statement. When his opinions clashed with those of the Treasurer, he recanted or recast them. Unlike Browning's Grammarian, his life was the "low levels," but he was ever ready, even eager, to assist those who worked for the morning. Petty professional jealousy he did not know. The love of practical joking, even at the expense of personal inconvenience to his friends, he never lost. Thus he left his nephew behind at a patient's house and allowed the lad to tramp back through London on a wet night. In justice it must be said he did not mind being made the victim of a joke himself. He was singularly free from affectation. The way in which he accepted his largest fee from the eccentric Indian planter, Hyatt, is a case in point; his behaviour at the bedside of the King is another. His great weakness was his inability to control his temper, and his nephew gives many instances of the violence and unreasonableness of his outbursts on the slightest provocation. His mind, so far as things outside his profession were concerned, was entirely conservative, and he looked askance upon innovations, of which he would not realize the immediate benefit. Thus the velocipede, then coming into fashion, was the subject for vehement diatribes. He declared that it meant the moral and physical ruin of mankind, as it meant the extinction of horse breeding, and the increase of highway robbery!

Astley Cooper stands, all things considered, high in the list of English surgeons, and a century has not materially affected his position of eminence, which he occupied up to the day of his death. Honours were showered upon him. Oxford gave him a D.C.L.; France the Legion of Honour; Holland made him a corresponding member of its Royal Institute; Gottingen elected him a member of its Royal Society, then one of the most brilliant of scientific associations; Russia sent him the diploma of M.D. of the Royal University of Vilna; and Mexico joined in the chorus by appointing him a member of the Medical Society of Gaudalaxara. The King gave him a baronetcy and the Grand Cross of the Guelphic Order, while in Scotland he was proposed as Lord Rector of Glasgow University.

There are several pictures and engravings of the man in existence. The best of these—that of which a reproduction is presented with this number—is the well-known portrait by Lawrence, which was engraved by Cousins. At the Royal College stands his bust, executed by the sculptor Behnes; in the Medical Buildings of Guy's is the bust by Town. In St. Paul's Cathedral is a monument, erected by subscription some years after his death, from designs by Bailley. In our own crypt—unknown territory to the average Guy's man—stands his sarcophagus, a plain stone coffin, similar to that in which rest the remains of Thomas Guy. It bears a brass plate, which originally had an inscription. Now the ravages of time have made it impossible to decipher more than a few words. Above are his arms, surrounded by the ribbon and grand cross of the Guelphic Order, and below may still be read a few words:—"Sir Astley Paston Cooper, Baronet. Died 12th February, 1841."

In the chapel is the tablet erected to his memory by the Governors. It bears the following inscription :—

In Memory of
SIR ASTLEY PASTON COOPER, Bart.,
For Twenty Five years
Surgeon to this Hospital,
Who died on the 12th February, 1841,
Aged 73 Years.

By His Own Particular Desire
His remains have been deposited
In the Vault Below,
Within the precincts of the Institution
In which he received his professional education,
and which,
Having contributed to the development,
Enjoyed the benefits, and shared the lustre
Of those remarkable talents
Which won for their possessor
The undisputed title of
The First Surgeon of his age.

To mark the resting place of
So distinguished a man,
And to evince their sense of
His services to the Hospital,
The Governors
Have caused this tablet to be erected
On the occasion of
The repair and decoration of the Chapel
In the year of our Lord 1888.

A few words about the bibliography of Astley Cooper may fittingly conclude this short summary of his history. His chief works were the following:—Observations on Inguinal and Congenital Hernia, London, 1803; The Anatomy and Surgery of Inguinal and Congenital Hernia, London, 1805; The Anatomy and Surgery of Crural and Umbilical Hernia, 1807; The Anatomy and Surgery of Abdominal Hernia, 1827-28; Surgical Essays (with Dr. Travers), 2 vols., 1818–19; A Case of Ligature of the Abdominal Aorta, Med.-Chirurgical Transactions, 1818; Fall einer unterbindung der Aorta, Rust's Magazin fur Heilkunde, t. iv., 1818; A Treatise on Dislocations and Fractures of Joints, 1822; Other Editions, Rearranged, of the same Work, 1823–24–26; American Edition with Emendations and Notes by Godman of Philadelphia, 1825; German Edition, with Notes by Cooper, Weimar, 1825; Memoire sur la ligature de 'l'aorte ventrale, avec un lettre de 'l'auteur sur la ligature, Paris, 1823; Observations on Fracture of the Neck of the Thigh Bone, 1823; German Edition, 1824; Lectures on the Principles and Practice of Surgery, Delivered at Guy's Hospital, with Notes and Illustrative Cases, 3 vols., 1824–1827; Illustrations of Diseases of the Female breast, 1829; Observations on the Structure and Diseases of the Testicle, 1830; A Case of Strangulated Hernia, in Med. Records, t. I. p. 127–29; Three Instances of Obstruction of the Thoracic Duct, in Med. Records, vol. I., p. 86; Observations on the Membrana Tympani, in Philosophical Transactions, xc., p. 151, 1800; Observations on Aneurysms, in London Med. and Phys. Journal, 1802; A Case of Malformation of the Urinary and Genital Organs in a Cow, in Edinburgh Med. and Surg. Journal, vol. i., p. 129–132, 1805; A Case of Carotid Aneurysm, New York Med. Reports, xii., 1809; A Case of Aneurysm of the Aortic Arch, in New York Med. Reports, 1809; A Case of Aneurysm of the Carotid Artery, in London Med. and Chir. Transactions, 1812; Notes on the Dissection of a Limb upon which the Operation for Popliteal Aneurysm had been Performed, Ibid., 1813; Some Observations on Spina Bifida, in London Med. and Surg. Journal, 1813; A Case of Premature Puberty, Ibid., vol. iv.; An Account of the Anastomoses of the Arteries in the groin, Ibid., 1813; Three Cases of Calculi Removed from the Urethra without the use of Cutting Instruments, Ibid., vol. viii.; Experiments on Digestion, 1817; Lectures Delivered at St. Thomas' and Guy's Hospitals, 1824; Articles on the Manifestations of Syphilis, in the *Lancet*, 1824–26; Further Experiments on the Physiology of Digestion, in *Lancet*, 1823; On the Junction of the Spleen, in *Lancet*, 1835; The Anatomy and Diseases of the Nails, in London Med. and Surg. Journal, vol. vii., 1817; On a Case of Dislocation of the Pelvis, in London Med. and Chir. Review, 1829; Some Observations on the Spleen, in *Lancet*, 1838 (apparently his last article).

For further particulars of his life, the biography, in two volumes, by his nephew, Bransby Cooper, may be consulted. Mr. Bettany, himself a Guy's man, has contributed an excellent article on Cooper to the "Dictionary of National Biography," and the "Biographical Dictionary of Guy's Hospital" contains a fuller, and in some points a more accurate, account. Malgaigne's article, cited by Dureau, I have not been able to consult. Biographical notices appeared in the "Gentleman's Magazine," in the London *Times*, and in the *Observer*, while most of the foreign medical dictionaries devote a page or two to his life and work.

From the Gazette's Special Pathologist.

Directions to be followed in sending *Diphtheritic Membrane* :—Remove as much of the membranous exudation as possible with a pair of forceps, which have been sterilized by boiling water. Place the exudation in a small, perfectly clean empty bottle, with a well-fitting glass stopper, and forward without delay. No preservative fluid should be used. The specimen must be accompanied by a Postal Order for 5s. A telegram will be despatched immediately the examination of the specimen is completed.

C. D. P. S., Huddersfield. — This breast tissue is densely indurated, the result of chronic mastitis, and as a result there has been considerable pressure at the base of the nipple, and consequent dilatation of ducts. We find no evidence of malignant growth.

T. R. A., Chadwell Heath.—This specimen of sputum contained some patches of muco-pus, but no tubercle bacilli were found. PATHOLOGIST.

2 p.m. to 4 p.m.—SUNDAY VISITORS.

A Note on the Function of the Pericardium.

Of recent years the views of Hill and Barnard as to the function of the pericardium have met with wide acceptance. That the fibrous pericardium should have the power to restrain dilatation of the heart under exceptional circumstances may appear to be a reasonable explanation for the existence of this membrane, yet what may seem to be simple and obvious does not always prove to be a correct interpretation of facts.

It may be interesting to consider a few points in connection with this power—which the pericardium is thought to possess—of acting as guardian to the limits of distensibility of the heart. In the first place, it is scarcely necessary to remember that during life all four cavities of the heart are never fully distended at the same moment; were they at any time thus all filled, the distended auricles, when contracting, would be unable to force any blood into the already distended ventricles. It must be perfectly clear, therefore, that if the pericardium possessed the power of restraining over-distension of the heart it must be of a capacity that will never allow all four cavities to be completely filled at the same time. If the pericardium is to be a check upon over-distension, it must, when the auricles have reached a dangerous degree of dilatation, put a stop upon further entry of blood into them until they have discharged their contents into the ventricles. The blood will then merely be transferred from one part of the heart to another. It will still be within the pericardium, and if the pericardium has been able to prevent more blood entering the auricles than is now in the ventricles, there can be no more space within itself for further entry of blood until the ventricles have discharged what they have received. To put the matter briefly, if the pericardium is to restrain over-distension of the heart, it must be of a size that will allow only both auricles or both ventricles to become fully distended at the same time.

Six years ago, in order to test the comparative capacity of the pericardium and of the heart, I carried out a few simple experiments on the dead body. I first distended the pericardium with water at a certain pressure, and then, after opening the pericardium, distended the cavities of the heart at the same pressure. My method of procedure was as follows:—Making a very small incision into the pericardium, I inserted a fine nozzle and tied it in. The pericardium was then distended with water at a pressure of a column of water of the height of ten inches, the amount used for distension being measured. The inferior vena cava and branches of the pulmonary artery were then tied as closely as possible to the pericardium and the nozzle inserted and tied into the superior vena cava. After the pericardium had been laid open, the right side of the heart was distended with water at the same pressure that had been used for distending the pericardium, and the amount of water used measured as before. Here it may be mentioned that a fact, of which it is scarcely necessary to say that I was aware, yet was foolish enough to ignore, made itself evident. In the second case in which distension was thus being carried out, while water was being poured into the right side of the heart, it flowed freely from the unligatured vessels of the left side of the heart. Water entering the cavities of the right side of the heart had escaped readily through a patent foramen ovale into the left side. In later experiments, therefore, the vessels leaving and entering the heart on the left side were also tied before any distension was attempted. The comparative capacity of heart and pericardium was tried in twelve cases. In three of these twelve, water entering the right side of the heart passed to the left through a patent foramen ovale, and by a curious coincidence in a fourth it passed through a small aperture in the undefended space. It may be mentioned, in passing, that the above percentage of cases of patent foramen ovale is about the normal. The patency is of valvular character, yet obviously, as the above experiments showed, does not prevent the passage of fluid from the right side of the heart to the left when the right auricle is fully distended.

To come, however, to the results of the distension as illustrating the comparative capacity of the heart and pericardium, these seemed to show that the capacity of the pericardium is generally considerably greater than that of the whole heart, even when all the cavities are fully distended, and, therefore, that the pericardium can have little if any power—at least in the majority of instances—of restraining dilatation of the heart. From the twelve cases I may mention four in which the cause of death was enteric fever. Rigor mortis had passed off, and the cardiac muscle in enteric fever one would think as likely to be easily distended as in death from almost any disease. In a man aged 24 the pericardium held 20 ounces of water, the four cavities of the heart 14 ounces of water and blood-clot. In a boy aged 14 years the pericardium held 15½ ounces, the heart 9½ ounces. In a man aged 21 the pericardium held 20 ounces, the heart 15½, and in a youth aged 18 the pericardium 12 and the heart 11. In this last case there was a near approach of the capacity of the heart to that of the pericardium, and in two others the heart held more than the pericardium. In the remaining six, however, as in the four previously mentioned, the pericardium held more than the heart, that is to say, the capacity of the pericardium in ten of the twelve cases was greater than that of the heart.

Brief notice of the two cases in which the heart held more than the pericardium may be of interest. The heart of a young woman, who died from suppurative peritonitis following perforation of a gastric ulcer, held 22 ounces, while the pericardium held only 15½ ounces. Possibly the dilatation of the heart in this case may have been partly dependent upon anæmia and partly upon septicæmia, consequent upon the peritonitis. The

other case is more instructive. The heart of a sailor, aged 46, who died of cardiac disease, held 30 ounces, while the pericardium had previously been found capable of holding only 24 ounces. Further examination of the heart showed it to be free from valvular disease, but affected with extensive fibroid degeneration of the muscle-wall. The fact that in this case the heart was found capable of holding more water than the pericardium, strengthens instead of weakening my contention that the pericardium does not under ordinary circumstances restrain dilatation of the heart. Here we have a heart dilating under the influence of disease, and it dilates to a size—when all the cavities are fully distended—considerably in excess of the capacity of the pericardium.

Such a case shows that it cannot be denied that in cases of great enlargement of the heart under the influence of disease, the heart may so fill the pericardium that possibly the fibrous membrane may to some extent regulate the amount of blood which enters the heart. But none, I believe, will be bold enough to assert that under the influence of exertion the healthy heart will become so dilated as to be able to hold blood approaching in amount that held by the greatly enlarged heart of disease. I have put very great strain upon my own heart. I have ridden up a hill on a bicycle which, I believe, only three or four cyclists have attempted to ride, but could detect no change in the position of my cardiac impulse.

That the capacity of the pericardium is considerably greater than that of the heart is suggested by clinical experience. Although the pericardium is fixed to the upper surface of the diaphragm, it is unable to prevent very considerable lateral displacement of the heart in conditions of altered pressure in one of the pleural cavities. If the pericardium fitted the heart closely this lateral movement could not take place.

That there is generally a considerable amount of distensible space between the heart and pericardium is also often suggested by the experience of the post-mortem room. It is not very uncommon to see a few ounces of fluid in the pericardium in cases in which there has been no noteworthy disturbance of cardiac action during life. This remark applies to fluid occurring where there is no evidence of pericarditis, or pericarditis of extremely limited character. But in cases of well-marked pericarditis also it seems to me that the presence of fluid in sufficient quantity to require aspiration, merely because of mechanical interference with cardiac action, is one of the rarest of pathological conditions. The theory, however, of the importance of the restraining influence exerted by the pericardium upon the heart has been introduced into pathology. It has been thought that rapid enlargement of the heart which may occur in rheumatic pericarditis is due to softening of the fibrous pericardium by inflammation which allows the heart to dilate. But it is interesting to note that enlargement of the heart in rheumatic pericarditis presents features which suggest that some far more subtle influence is at work than a simple dilatation due to the removal of a restraining force. In rheumatic pericarditis the heart not only dilates but, as was pointed out long ago by Dr. Goodhart, rapidly increases in weight. I have known the heart of a child apparently double its weight in fourteen days. In the case of a child suffering from rheumatism with rheumatic nodules, where I had carefully examined the heart and could detect nothing abnormal in size or other features, pericarditis developed. The heart rapidly enlarged, and after death at the end of fourteen days was found to weigh $11\frac{1}{2}$ ounces, about double the normal weight for the age of the child, a girl of 11 years. Mere yielding of the pericardium, it is scarcely necessary to remark, will not explain this strange rapid enlargement, in which apparent hypertrophy plays as important a part as dilatation.

The post-mortem room, however, affords other stronger evidence against the view that dilatation of the heart in pericarditis is due to yielding of the pericardium. In suppurative pericarditis, associated with various septic conditions or with pneumonia, the heart shows little, if any, dilatation. The difference between the size of a heart affected with rheumatic and with suppurative pericarditis is generally very remarkable. I do not think this has attracted much attention, but the fact struck me in the early days of my post-mortem experience, and Dr. Still has independently observed the absence of dilatation in suppurative pericarditis. It must be clear that if yielding of the pericardium is the explanation of enlargement of the heart in rheumatic pericarditis, the more acute form of inflammation of the pericardium should be accompanied by still greater enlargement.

But allowing, as seems to me indisputable, that the pericardium has not the function of restraining dilatation of the heart, it may be asked what value has it? This is a question not easy to answer. Possibly, however, the heart being an actively contracting muscular organ, in the midst of passively moving viscera, has been provided with a covering similar to that of the voluntary muscles. One would think that many of the muscles could as easily be deprived, without loss of efficiency, of inter-muscular septa as the heart of the fibrous pericardium.

To mention again some of the preceding remarks:—

1. Distension of the pericardium and of the heart with fluid shows that the pericardium is generally considerably more capacious than the heart even when all four cavities are filled.

2. Clinical and pathological facts, such as the ease with which the heart can be laterally displaced, and the occasional presence of fluid in considerable quantity within the pericardial cavity, show that the fibrous pericardium does not fit the heart closely.

3. The suggestion that in rheumatic pericarditis enlargement of the heart is due to dilatation following yielding of the pericardium is shown to be fallacious by the fact that in suppurative pericarditis dilatation of the heart is generally absent.

THEODORE FISHER.

In Lighter Vein.

THE CATERING SCANDAL IN THE BACTERIOLOGICAL DEPARTMENT.

A Special General Meeting of the Bacillus Club was held on the incubator in the front surgery on Thursday last. The chair was taken by B. subtilis, who was supported on the platform by the Micrococcus tetragenes. the honorary secretary. There were forty-eight members present.

The chairman, in the course of his opening remarks, explained that the meeting had been called to consider the question of the catering. As he knew little about the matter himself, never having the privilege of partaking of cultures in the Bacteriological department, he would call on certain members whose names had been furnished him by the secretary.

In response to the chairman's appeal, the Streptococcus lanceolatus said that matters had come to a climax in the Bacteriological department. Under the new régime it was almost impossible to obtain good food. In his own case the broth was always acid, and therefore perfectly uneatable. He believed the time had come for changing the caterers. He had gone carefully into the figures, comparing them with those supplied by a friend who had the advantage of belonging to the Park Hospital Club. From his statement it appeared that Messrs. Eyre and Louisson were making enormous profits on the supplies. He believed, for instance, that he was right in saying that sheep's hearts were bought for a song, and that broth cultures were manufactured at a comparatively cheap rate. The lab. boy's pay would not amount to much, and on every day the caterers would have a clear profit of at least fivepence. That sum, he thought, should go into the club funds.

The Micrococcus melitensis, who on rising was received with much waving of flagellæ, said that Messrs. Eyre and Louisson were utterly incapable of managing the catering department. The potatoes served out were such that no decent bacillus could tenant them. He moved that the meeting resolve that the caterers be removed. (Applause.)

Asked by the chairman what he really meant, the micrococcus said that he thought the caterers should be removed—ejected. (More applause.)

The Bacillus œdematis ærobicus said that although he was a member of the club, he really did not know what his privileges were. It was scandalous that matters should go on as they were going on. He suggested that the catering should be leased to an outside firm, care being taken that the cultures were such that one could ask a friend in on occasion.

The Bacillus lactis ærogenes appealed to members to consider what they were doing. If a committee was appointed it should be a working committee, and should enter earnestly upon its duties.

The Streptococcus longus proposed that a committee be appointed to consider the advisability of appointing another steward, the committee to consist of himself, M. melitensis, M. tetragenes, Streptococcus lanceolatus, and one of the younger members, such as Bacillus vincentii.

Bacillus tuberculosis thoroughly agreed with the last speaker, and with those who had spoken previously. The agar supplied by the caterers was never properly dechlorinated, and the potatoes were unfit for use. He was a member of several clubs, and could speak from personal experience. Recently certain innovations had been introduced into the department which he, as an old club member, regarded as highly reprehensible. (A voice : "Opsonins.") He would not go into details, but he would cordially support whatever proposal there was to get rid of the present caterers.

B. coli communis said that he, too, like the last speaker, belonged to several clubs, and he thought that the Bacteriological department was by no means the worst of its kind. Some members objected to acid broth, and some to alkaline cultures. For his part, he would say that he thought members were much too fastidious. If they had to put up with what he had to put up with, they would not be so mealy-mouthed. He remembered an occasion when he lived for a month on ——(Cries of "Order," and interruption, during which the chairman was understood to remark that the honourable member should confine himself to the resolution before the meeting.)

The Staphylococcus albus said that the meeting really had no power to dismiss the caterers. That was a matter which was entirely in other hands. The figures given by the S. lanceolatus were utterly unreliable. Personally he did not think Dr. Eyre made much profit out of the club members. (A Voice : "What about Louisson's article in the Reports?") Certainly not fivepence a day. He thought some members were grossly overstating the case. It was

true there had been real grievances. The incubator was sometimes allowed to get cold, and he believed on one occasion the former caterer had appropriated for his own use certain contributions which the readers of the old *Guyoscope* had sent in for a Christmas dinner to the Club. That point was never properly explained, but the then caterer was no longer here. Personally he would be very sorry if the meeting passed the resolution.

The chairman then put the question to the meeting, and it was declared carried by forty-two flagellæ against three. It was decided to forward the Committee's report to the Superintendent for action in the matter. A vote of thanks to the Bacillus subtilis for occupying the chair was carried by acclamation, and the meeting then broke up.

B. ANTHRACIS.

Musical Society's Concert.

A VERY successful Concert of vocal and instrumental music was given in the Court Room of the Hospital on Tuesday evening, December 11th.

The Hospital is to be congratulated on its excellent Musical Society, the choral part of which displayed careful training, good ensemble, and as a rule a very good balance.

A few words, however, on the performances of the various items, will, perhaps, show where the weak points lie, which might be easily altered by a little attention, and which, when corrected, might leave little to be desired in the way of a perfect performance.

The principal fault to be found with nearly every number was a lack of attention to the marks of expression, thus making the music colourless, and sometimes a little monotonous. This was particularly noticeable in the first number on the programme, Webbe's glee, "Thy Voice, O Harmony." Macirone's spirited "Autolycus' Song" followed, but needed more attack in the higher register of the sopranos; this was probably due to nervousness.

But for a slight discrepancy of pitch, in which the tenors were the chief defaulters, Sullivan's "Evening" was most expressively sung; but here, too, the "pianissimos" might have been made more of.

By far the best item in the first part of the programme was Coward's "Take thy banner." This was given, unaccompanied, with much spirit and good attack, the balance of the voices being, perhaps, not quite all to be desired.

Mendelssohn's "Vintage Song," "Phillis' Choice," and "The Vikings," in the second half of the programme, were excellently rendered, and were quite the best efforts of the evening, everyone seeming to have warmed up to their work by this time.

Too high praise cannot be bestowed upon the performance of Mozart's "Serenade in G," by a small orchestra of strings, under the baton of Mr. H. L. Eason.

This is a new addition to the Musical Society, and the performance was the first public one. The Hospital may be proud of such an excellent little band, who did themselves and everyone concerned such credit. It might be suggested that they amalgamate in some little cantata, or such-like work, with the Choral Society; the latter would then receive that support which at present seems a little necessary.

Nurses Pearce and Baker, Messrs. E. L. M. Lobb and P. S. Price, were heard to advantage in Mendelssohn's quartette, "Departure," and Sullivan's "The Long Day Closes," the last being very prettily sung. The men's voices should have been a little softer throughout.

Messrs. M. M. Adams, I. S. Spain, P. S. Mills and P. S. Price, combined effectually in two male quartettes, "My Lady is so Wondrous Fair," and "The Goslings;" the latter, with its amusing references to the "Wedding March" and the "Dead March," so appealing to the humour of the audience that an encore was demanded. Mr. H. Chapple, who possesses an excellent tenor voice, sang with much artistic feeling, "Speak but one Word" (Lambert), and "Athos at the Lattice" (Amy Woodford-Finden), being much appreciated. Other items were "The Hidden Pathway," charmingly sung by Nurse Cockin, "To Anthea," rendered effectively by Mr. H. P. Warner. Nurse Archbold delighted the audience with a song, and last, but by no means least, Sister Cornelius recited Christina Rossetti's "Jessie Cameron" with much dramatic feeling and pathos, giving evidence of histrionic talent of a high order. She responded to the hearty applause with an amusing trifle, "The Language of Lovers." Mr. Henry Taylor conducted the various choral items, and the Society is greatly indebted to him for his painstaking labour. Miss Margaret Taylor accompanied the various numbers with good taste, and was presented during the evening with a handsome bouquet, amidst enthusiastic applause.

HUBERT BATH.

Pass List.

UNIVERSITY OF CAMBRIDGE.—DEGREE OF M.B. CONFERRED.—H. M. Clarke.

NOVEMBER, 1906.

FINAL FELLOWSHIP EXAMINATION.—R. A. Greeves, E. C. Hughes, G. C. F. Robinson.

PRIMARY FELLOWSHIP EXAMINATION.—C. M. Plumptre, H. Joste Smith.

Sir Astley Cooper as an Operator.

It is a matter of considerable difficulty for us at the present day to form a definite idea of the merits of Sir Astley Cooper as an operator. The qualities demanded of an operator at the commencement of the twentieth century are in many respects very different from those required from the surgeon of a hundred years ago, and we can well understand that in those days, without anæsthetics, and in the absence of all aseptic precautions, many minor operations now frequently performed by dressers were matters of considerable difficulty to even the most able and experienced surgeons. The following extract from the *Lancet* (1823, p. 274) shows us that in those days the operating theatre was used for strange purposes:—"Friday, November 21st.—At half-past one the operating theatre at Guy's was crowded to excess in consequence of its having been stated on the preceding Tuesday that some experiments were to be tried on a dog this day for the purpose of ascertaining whether liquids could be put into the stomach and removed from it by means of an instrument which had lately been invented. Prior to making the experiment, a middle-sized steatomatous tumour was removed from a woman. . . . Sir Astley Cooper, just after the experiment had been tried, looking at what had been removed from the stomach, smiled and said that the instrument would do well for an alderman after a city feast. (A laugh)."

At the commencement of the last century, too, it must be remembered that operations were of comparative rarity and surgical cases were very frequently treated by drugs splints, cupping, or various poultices, of which latter the Guy's Hospital Pharmacopœia of 1818 contained no less than eleven.

We can learn something of the operations of those days by glancing at the early numbers of the *Lancet* which, under the heading of Hospital Reports, described interesting cases, lists of cases admitted to, and operations performed at, the various hospitals. It is no uncommon thing to find that at Guy's, as well as the other London hospitals, that "no operations were performed this week." What a contrast with the present time with our six operating rooms in daily use!

Sir Astley Cooper resigned his post of Surgeon to Guy's in January, 1825, and the *Lancet* was first published in October, 1823. Hence, by consulting the hospital reports in the *Lancet* for these sixteen months, we can ascertain the actual operations performed by Sir Astley at Guy's during that time. Presumably the list is not complete; indeed, reports from Guy's are not given in every number, but we may certainly conclude that this list contains most of his operations of special interest, and is typical of his work at the hospital. It must, however, be pointed out that he was then past his prime, and not infrequently was away owing to ill-health.

The following twenty-eight operations are recorded as having been performed by Sir Astley Cooper:—

Tapping and injecting hydrocele, four times.
Excision of steatomatous tumours, three times.
Excision of breast for carcinoma, twice.
Excision of breast for "fungous tumour."
Amputation of leg, three times.
Amputation of thigh, twice.
Amputation at hip joint.
Perineal lithotomy.
Fistula in ano.
Division of sphincter for rectal ulceration.
"Excision of prepuce."
Amputation of arm (for "fungus hæmatodes" of the elbow).
External urethrotomy for stricture and extravasation.
For perineal urinary abscesses.
Hare lip.
Paracentesis abdominis.
Excision of lip for epithelioma.
Excision of nævus on nose.
Amputation of the penis for epithelioma.

Details are given of some of these operations. Thus we read that the amputation at the hip-joint was effected by an anterior racket incision, the femoral artery was ligatured below Poupart's ligament at the commencement of the operation, and that the total quantity of blood lost was twelve ounces. The operation lasted altogether thirty-five minutes, of which securing the arteries and the application of dressings occupied fifteen. "The patient bore the operation with extraordinary fortitude, and after it was finished said to Sir Astley that it was the hardest day's work that he had ever gone through, to which Sir Astley replied that it was almost the hardest he had ever had."

The case of perineal lithotomy died in four days apparently from secondary hæmorrhage, the artery to the bulb having to be secured two days after the operation.

In 1817 Sir Astley Cooper ligatured the aorta one inch above its bifurcation for an enormous aneurysm in the left groin, involving the common and external iliac arteries. The skin covering the sac was commencing to slough, and several small hæmorrhages had occurred. The operation was carried out through an incision three inches in length, having its centre at the umbilicus, and as is well known the patient lived for forty hours afterwards. In reading of this case one admires equally the reasoning on which the operation was based and the skill with which the operation was performed.

We have thus gained some idea as to the nature of the operations performed by Sir Astley Cooper, and we have now to endeavour to form some estimate as to the manner in which these were carried out. In the Biographical History of Guy's Hospital we are told that after his death there was found among Sir Astley's papers an estimate of himself written in the third person. "Sir A. Cooper was a good anatomist, but never was good operator where delicacy was required. He felt o much before he began ever to make a perfect operator."

That the opinion of his contemporaries, who were surely the best judges, was different to his own estimate, is shown by the two following quotations from the same book.

A medical man who was present in the Guy's operating theatre during an operation by Sir Astley Cooper, says:—"The sight was altogether interesting, the large theatre of Guy's crowded to the ceiling, the profound silence obtained upon his entry, that person so manly and so truly imposing, and the awful feeling connected with the occasion, can never be forgotten by any of his pupils. The elegance of his operation without the slightest affectation, all ease, all kindness to the patients, and equally solicitous that nothing should be hidden from the observation of the pupils, rapid in execution, masterly in manner, no hurry, no disorder, the most trifling minutiæ attended to, the dressings generally applied by his own hand, the light and elegant manner in which Sir Astley employed his instruments always astonished me."

When we read accounts of the operations of our great surgeon, we cannot but feel that this quotation gives a true picture of his merits as an operator. Indeed, the two leading characters of Sir Astley Cooper seem to have been promptness in diagnosis and rapidity and skill in execution.

In conclusion, the following observation of Mr. Chandler, Surgeon to St. Thomas's Hospital, may be quoted from the "Biographical History of Guy's Hospital." "Sir," said Mr. Chandler. "It is of no consequence what instrument Mr. Cooper uses; they are all alike to him, and I verily believe he could operate as easily with an oyster knife as the best piece of cutlery in Laundy's shop."

Novelties.

Sanatogen.

In previous issues we have had occasion to refer to the distinct merits of this artificial food. The new samples supplied recently by the Sanatogen Company are in every way such as to uphold the company's record for excellence in the past. Sanatogen powder, as in the samples forwarded to us, is put up in small tin boxes, which keep the powder admirably dry. It is unnecessary to detail the good points about Sanatogen as a food. Since its introduction, now a good many years ago, it has become a favourite, both with the profession and with patients, and although the number of artificial foods and "manufactured proteids" has increased, probably out of all proportion to the demand, Sanatogen has easily kept the high position it occupied from the beginning in the ranks of artificial food products.

The value of Sanatogen in the dietetic treatment of enteric fever is strongly insisted upon by Dr. Meredith Young, Medical Superintendent of the Stockport Corporation Hospitals. Discussing the causation of constipation by the ordinary concentrated foods, Dr. Young remarks: "Naturally the use of foods which are so selected as to be almost entirely assimilated before arrival in the lower bowel, tends to produce constipation in exactly the same way as the use of highly concentrated or compressed food extracts, *i.e.*, by depriving the muscular coat of the intestine of the natural excitation produced by the passage of more or less irritating undigested material. But I have found Sanatogen an excellent corrective for this, and the cases are indeed rare, in my experience, where, when Sanatogen is added to the dietary, resort has to be made to any artificial emptying of the bowel." Again, in dealing with the objections to a pure milk diet, he remarks: "The condition of our milk supply is such that no physician can put a patient with lowered powers of resistance on a prolonged diet of raw milk without incurring grave risks. Accordingly, the milk given to my enteric fever patients is always boiled, and the loss of lecithin is made good by the addition of Sanatogen." As a combination of pure casein with glycerosphosphate of soda, Sanatogen contains a large amount of soluble proteid with a quantity of organic phosphorus, which greatly increases its value as a "metabolic stimulant." Striking cases of rapid improvement upon a Sanatogen diet are cited by Dr. Young in the article quoted. (*Public Health*, September, 1906.) Sanatogen is easily prepared, and can be taken stirred up in warm water, or with cocoa, or, indeed, any warm beverage. The sole manufacturers are The Sanatogen Company, 83, Upper Thames Street, E.C.

Births.

MILLS.—On November 6th, at Kroonstad, Orange River Colony, the wife of Charles Mills, L.D.S. Eng., F.I.C., of a daughter.

PIKE.—On December 1st, at Cromwell Crescent, the wife of Douglas Pike, M.A., M.B., B.Ch., of a son.

STEWART.—On November 23rd, at The Gothics, East Bergholt, the wife of Bernard H. Stewart, B.A., B.C. Cantab., of a son.

SWAYNE.—On 2nd December, at Mathon House, 56, St. Paul's Road, Clifton, Bristol, the wife of Walter Carless Swayne, M.D., B.S. of a daughter.

Marriages.

BONSOR—FERGUSSON.—On the 6th December, at St. George's, Hanover Square, by the Rev. Edgar Sheppard, D.D., Sub-Dean of the Chapel Royal, assisted by the Rev. David Anderson, Rector of St. George's, Hanover Square, Malcolm Cosmo, eldest son of Henry Cosmo Orme Bonsor, of Kingswood Warren, Surrey, to Sybil Henrietta, second daughter of Captain Kennet Fergusson, of The Hill, Crietown, Kirkcudbright.

MALCOMSON—MOTT.—On August 15th, at Leicester, Lieutenant G. E. Malcomson, I.M.S., to Ida, eldest daughter of Frederick Mott, Esq., of Birstall Hill House, Leicester.

Deaths.

BRICKWELL.—On November 30th, at Guy's Hospital, James Thomas Brickwell, L.S.A.

ROBERTS.—On November 29th, at Broadstairs, John Coryton Roberts, L.R.C.P., M.R.C.S., L.M., of Avenue House, Peckham Rye.

STEELE.—On December 1st, at Woodhouse, St. Mary Church, Devon, William Stott Steele, M.D., aged 79 years.

Ed.—C. L. L.

GUY'S HOSPITAL GAZETTE.

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Passim.

CHRISTMAS has come and gone, but as the GAZETTE goes to press there still ring in the wards the refrains of the merry-makers, while in the colonnade there still remain posters calling upon the faithful to attend this or that concert. For to Guy's Hospital, more to us, perhaps, than to most other hospitals in London, Christmas is not a mere matter of twenty-four hours. It lasts longer, and we contrive to get more solid satisfaction out of it than did the mysterious Formosans out of their ten-day festivals.

FORMER writers in this column have lamented the fact that a GAZETTE in Christmas week must of necessity contain but an incomplete and hastily-compiled record of things done, and the methods which made them successes or otherwise. It is difficult to get reports of concerts and criticisms of events sub-edited in time for the week's issue, but it is to be questioned if that difficulty is altogether and entirely to be deplored. Not only is it impossible, at break-neck speed and with the exuberant haste of a penny-a-liner contributor, to criticise, weigh, compare, and contrast things and matters which are still very vivid to each and all of us, but there is a further difficulty in the danger which lies in what Lord Derby used to call "hap-hazardising." Therefore we refrain for the time being from commenting on our Christmastide in detail. In the large it may be remarked that the Niggers sustained their reputation for excellence, and by their thoroughly enjoyable performances gave the lie to those prophets of evil who prognosticated, from the rehearsals during the past weeks, a calamitous break in the successful chapter of the Guy's Nigger Troupe; that the Residents' Theatricals fully came up to expectations, and that the various ward concerts which have so far been held, gave unlimited satisfaction to those who attended them. So much has been said about the weather by the lay press—for we claim the right of prefixing a distinctive adjective to our contemporaries whose medical contributions end with quack advertisements—that the Passimist has nothing to add to the subject.

A WORD of appreciation is due to the excellent posters which were displayed or are still being displayed about the Hospital. In former years the poster work in connection with the concerts reached a high standard of artistic merit, but we venture to think that some of the designs exhibited this year "are finer in quality, and better in taste"—to adopt a line from our advertisement columns—than any which we have hitherto noticed. Equally attractive have been the various programmes, chief among which came the Nigger programme, a production which reflects credit alike on arrangers, designer and publisher.

We publish elsewhere in this issue a few notes from Surgical Out-patients, to which we beg to draw the attention of all those who leave their initials hours beforehand on the horsehair seats in the Out-patient Department. Formerly such notes used to be a feature in the Gazette, but during the last couple of years they have been conspicuous by their absence. The reason for this is not far to seek. No attending student at Outers ever thinks of the Gazette, or considers for a moment the value of his notes to those who, unlike himself, have not had the privilege of attending the physician or surgeon. And yet their value is very great, and they have an interest not only to present students, but to old readers of the Gazette who are not in a position to attend Outers and who have little or no time to read text-books. We shall always be glad to publish and grateful to receive any notes, however brief, of interesting or typical cases either from the medical, surgical, obstetrical, skin or eye out-patients.

"Don't you think," writes an Indian correspondent, to whom we are indebted for the letter "hereunto appended," as the Departmental Officials say, "that the enclosed might serve as an illustration of the native's supreme knowledge of the human frame?" The letter is well worth a space in "Passim," if only as a further contribution to the collection of Baboo malapropisms.

Parel,
9–8–06.

To the Inspector General of Police, Poona.

Respected Sir,

As my son is dangerously ill with enteric fever and complications of the womb I most humbly beseech your honour to grant me one months more leave in order to attend on him as he does not take the medicines and nourishment without me. There is no one to get medicines for him from Bombay. Under these circumstances I beseech your honour to grant me the leave.

I beg to remain,
Sir,
Your obedient servant,
Oliver D——
Clerk.

The many friends and pupils of Mr. F. G. Hopkins, F.R.S., Reader in Chemical Physiology at Cambridge, will hear with pleasure of his election to a Fellowship at Emmanuel College, Cambridge. Mr. Hopkins, who is an old Guy's man with a reputation which it is no empty flattery to style "international," has for many years been connected with the college that now mutually honours itself and him by bestowing on him a distinction which is the University hall mark of merit. In his case the recognition of merit is even more significant as he is not a student of either Cambridge or Oxford, but practically an outsider with the added drawback —and how real the latter is only a Cambridge man can rightly understand—of being a "stinks man."

The alteration in the dates of the examinations for the Treasurer's Gold Medals is not appreciated by the London men. They point out that the final examination and the examinations for the Treasurer's Medals clash with each other under the new regulations. A London man who is "up" for his final in that month is therefore debarred from competing for the Treasurer's Medals. The objection is undoubtedly a real and serious one, which seems, somehow, to have been overlooked by the authorities in changing the dates. The question accordingly has been reconsidered with the result that an official notice has been posted on the notice board in the colonnade, intimating that the examination will be held, as in former years, in June.

Through the courtesy of Messrs. Wright, Layman & Umney, the manufacturers and proprietors of Wright's Coal Tar Soap, we are enabled to reproduce the following amusing testimonial to the merits of that well-known soap. In preface it may be stated that the firm has been in the habit "of giving a shaving mug for every twelve wrappers of the soap—which pernicious system," writes Mr. Umney, "we have now stopped for some twelve months past":—

"——— Road, Forest Hill, S.E.

"Sir, i have saved your Wrappers and hope you will send me the mugs the soap as been used by young gentallman the Sons of Dockters that are *Students at Guys Hospital* and they will not use any other Soap but Wrights Coal Tar Soap and 4 of *them as pased and left*."

It is satisfactory to know that the good landlady received her mugs—even though the pernicious custom has been stopped. Students who are on the verge of "pasing" might do worse than give Coal Tar Soap a trial!

The vacancy created by the retirement of Dr. Sykes from the chair of Lecturer on Public Health, has been filled by the appointment of Dr. Richard King Brown, who is already well known to many Guy's men. Dr. King Brown has a brilliant university career to look back to

obtaining first-class honours and the Natural Science Exhibition at Dublin, graduating with honours in medicine, and winning the gold medal for his M.D. Thesis. He is a D.P.H. of the Royal Colleges, and has for more than six years acted as Medical Officer of Health for the Metropolitan Borough of Bermondsey. In the latter capacity he has become acquainted with many of us, present and past students of the Hospital, and in congratulating him on becoming more intimately associated with the Medical School, we feel that we are welcoming one who, though he is not a Guy's man in the strict sense of the word, is yet an old friend whose courtesy and kindliness we have had proof of. His first lecture will be on Friday next, the 4th January.

The "Bryant" Fund.

THE following is a list of subscriptions to the above fund to date:—

	£	s.	d.
Dr. J. F. Goodhart	52	10	0
Dr. Frederick Taylor	52	10	0
C. H. Golding-Bird, Esq.	52	10	0
Dr. Hale White	52	10	0
C. J. Symonds, Esq.	52	10	0
*Dr. L. E. Shaw	52	10	0
W. Arbuthnot Lane, Esq.	52	10	0
Sir Alfred Fripp	52	10	0
Robert Gordon, Esq.	50	0	0
A Friend	50	0	0
*Dr. Fawcett	30	0	0
W. Ilbert Hancock, Esq.	30	0	0
W. A. Maggs. Esq.	26	5	0
F. J. Steward, Esq.	26	5	0
Dr. Peter Horrocks	26	5	0
J. H. Targett, Esq.	26	5	0
H. Cosmo Bonsor, Esq.	21	0	0
*H. L. Eason, Esq.	21	0	0
Dr. J. W. F. Jewell	21	0	0
*Dr. D. W. Samways	15	0	0
*Dr. T. G. Stevens	12	12	0
Sir Thomas Stevenson	10	10	0
Charles Spurrell, Esq.	10	10	0
M. T. Martin, Esq.	10	10	0
Dr. A. F. Hertz	10	10	0
Dr. Maurice Craig	10	10	0
Richard Assheton, Esq.	10	10	0
Mr. and Mrs. C. H. Wells	10	10	0
"Anonymous"	10	10	0
Dr. and Mrs. C. W. Edwards	10	0	0
*Dr. Herbert French	9	9	0
*Montague Hopson, Esq.	9	9	0
*Dr. F. E. Fremantle	6	6	0
R. P. Rowlands, Esq.	5	5	0
F. J. Nicholls, Esq.	5	5	0
Dr. Mantell Dalby	5	5	0
Dr. A. A. H. Partridge	5	5	0
W. R. Millar & Sons	5	5	0
Dr. J. Ulethoff	5	5	0
"From a mere acquaintance"	5	5	0
Dr. M. Abdy Collins	5	0	0
*Philip Turner, Esq.	3	3	0
*Hamilton Hearnden, Esq.	3	3	0
*H. W. Webber, Esq.	3	3	0
E. H. S.	3	3	0
Dr. J. R. Steinhaeuser	3	3	0
C. J. Ogle, Esq.	3	3	0
*A. R. F. Eversbed, Esq.	3	3	0
T. W. L.	3	3	0
*Dr. Arthur Pearson	3	3	0
Dr. W. Ramsden	3	3	0
J. W. Bird, Esq.	2	2	0
Dr. John Robertson	2	2	0
Dr. John Young	2	2	0
E. P. Pulbrook, Esq.	2	2	0
H. E. Croker Fox, Esq.	2	2	0
A. S.	2	2	0
Dr. F. Newcomb Day	2	2	0
H. Hutchins French, Esq.	2	2	0
Dr. J. W. Russell	2	2	0
F. E. Hancock, Esq.	1	1	0
G. H. S. Daniell, Esq.	1	1	0
Dr. A. A. Millar	1	1	0
Dr. John Atkins	1	1	0
Dr. J. R. R. Pollock	1	1	0
Ridley Herschell, Esq.	1	1	0
A Friend	1	1	0
Dr. Walter Frith	1	1	0
Dr. C. F. Girling	1	1	0
John Howell, Esq.	1	1	0
L. S. H. Glanville, Esq.	1	1	0
Frederick Curtis, Esq.	1	1	0
Arthur J. Matthison, Esq.	1	1	0
Dr. B. A. Richmond	1	1	0
R. S. Roper, Esq.	1	1	0
Dr. Kenneth Anderson	1	1	0
J. Bromley, Esq.	1	1	0
M. C. Wetherell, Esq.	1	1	0
Dr. W. F. Colclough	1	1	0
Dr. Hugh Barber	1	0	0
M. J. Rees, Esq.	0	10	0

* Subscriptions payable in three annual instalments.

Appointments.

Civil.

COPLANS, MYER, M.D. Lond., D.P.H., Camb., has been appointed Demonstrator of Bacteriology, Faculty of Medicine, University of Leeds.

INGRAM, PERCY C. P., M.B., B.S. Lond., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer at the St. George's Union Infirmary, Fulham Road, S.W.

Naval and Military.

Staff-Surgeon A. E. KELSEY, R.N., is appointed to the *Trafalgar*.

Major E. CHRISTIAN HARE, Indian Medical Service, is promoted to be Lieutenant-Colonel.

BOOKS RECEIVED—Carter's Medicine, 9th edition; Whiteford's Glimpses of American Surgery; Swanzy and Werner's Diseases of the Eye, 8th edition; Harley and Goodbody's Chemical Investigation of Gastric and Intestinal Diseases.

The Anatomy of the Growth of the Long Bones and its relation to Injury & Disease.

A Paper read before the Pupils' Physical Society on Saturday, December 8th, 1906, by Mr. T. B. LAYTON.

GENTLEMEN,—The bones originally consist of mesodermic tissue with closely-packed cells. This is soon succeeded by cartilage, and in this cartilage ossification begins. In a typical long bone it is the central part which first becomes osseous, and this is called the diaphyses, in contra-distinction to the ends which remain cartilaginous and are called the epiphyses. At first these epiphyses are proportionately larger to the rest of the bone than they are later in life. This is well seen in the head of the humerus, where at birth the epiphysis extends down to the surgical neck, while at the age of seventeen the epiphysial line lies three-quarters of an inch above this. Later ossification occurs in the epiphysis. This starts at various dates for the different bones and proceeds until the epiphysis is bony from side to side. When this has happened it is only at the epiphysial line that growth occurs, and it is only at the epiphysial line that ossification can go on. The cartilage itself of the epiphysial line grows, and this is replaced on the diaphysial side by bone; further, in each bone the cartilage at one end grows more rapidly than does that at the other, and this newly formed bone is more highly vascular than is the other or older bone. Hence we have in each long bone, and at each end of the diaphysis, a layer of highly vascular osseous tissue, which layer is thicker at one end, the growing end, than at the other.

In health the bones grow from the periosteum, which lays down new bony tissue from its deeper layers. At birth there is no medulla in the bones; this becomes formed later by absorption from within. So by absorption of bony tissue already present, and by the laying down of new bone from the outside, the medulla is formed, and the bone grows in thickness. Now, at the age of eighteen months, the newly-formed medulla has a diameter about equal to the diameter of the bone at birth. Hence, at eighteen months of age, none of the bony tissue present at birth remains in the shaft of the long bone.[1]

Among others, John Hunter performed experiments on the growth of long bones, and the specimens of his experiments are still to be seen in the Royal College Museum. One specimen[2] shows how he made two holes in the long bone of a fowl and in these placed small shot. When the bird was killed later, though the bone had grown, the shot remained at the same distance from one another. A similar experiment[3] was done by cauterising the bone. Other experiments were done by feeding young pigs on madder. This was first done by John Belchier, a surgeon of our hospital.[4] The bone[5] laid down after the madder was given to the pigs was pink in colour, while that laid down before it was given, or after it was left off, was white.

Duhamel[5a] has made similar experiments. He placed a ring of wire round a growing bone, and then found it again later in the medullary cavity. He tried to explain his experiments on mechanical principles of expansion of bone, while it was John Hunter who first showed that the growth and moulding of bones came about by absorption of bone in one part and new formation in another.

Let us then consider the general anatomy of the periosteum and of the end of a long bone as I have above described them.

The periosteum consists of two layers, an outer one carrying the ramifications of blood vessels and nerves, and an inner elastic layer which lays down the new bone.

Along the shafts the periosteum is but loosely adherent, but to the epiphysial line it becomes very firmly attached and is much thicker than at other parts. Here also the epiphysial cartilage spreads out over the periosteum and becomes blended with it.

As the result of these two facts, viz., the thickening of the periosteum,[6] and the spreading out over it of the epiphysial cartilage, the epiphysis becomes cup-shaped.[7] The relation of the capsule of the joint to the epiphysis in its fully ossified state varies in different joints. Thus we see that at the upper end of the tibia the capsule of the knee-joint is attached entirely to the epiphysis;[8] while at the upper end of the radius the capsule of the joints in relation is attached entirely to the diaphysis,[9] so that the epiphysis lies within the joint, while, when we look at the upper end of the ulna, the epiphysial line crosses the attachment of the ligaments, so that both epiphysis and diaphysis[10] enter into the formation of the elbow joint. But not only does this relation vary in different joints, it also varies in the same joint at different ages. Thus the capsule of the shoulder joint in the small child lies entirely on the cartilaginous epiphysis, but as the fully ossified state is approached the epiphysial line comes nearer to the head of the bone, so that now on the inner side the ligament[11] is attached to the diaphysis, then crossing the line of junction it comes to lie on the epiphysis as its attachment follows up round the anatomical arch.

This fact of course follows from that mentioned above, that the epiphysis is relatively larger in the younger bone.

The upper end of the femur[12] is another good example of this point. For in the newly-born infant the whole upper end forms the epiphysis, and the capsule of the joint is attached to this. Later by the upgrowth of the calcar femorale and the formation of the neck from the diaphysis, the capsule leaves the epiphysis and is entirely attached to the diaphysis, so that the former lies altogether within the joint.

The epiphysis receives a blood supply entirely different from that of the diaphysis. Blood-vessels pass in from the periosteum of the epiphysis, but none pierce the conjugal cartilage.

Seeing, then, that the epiphysial cartilage and the periosteum are the two factors in the growth of the bone, we shall expect to find changes in these parts in any nutritional disease of childhood which affects the bones. Of this class of disease, rickets is the one which we here most commonly see. This is a general disease of nutrition which leaves permanent manifestations of its occurrence in the bones.

Children are not born with rickets;[13] the disease may start at any time after birth within the first few years of life, but however early it starts its effects on the bones are not readily recognisable until the child is a year old.

These changes may be described as "an exaggerated preparation for ossification and a diminished accomplishment of it,"[14] added to these is a great irregularity of the whole process.[15]

The histological changes of the epiphysial cartilage which precede its conversion into bone take place to an excessive degree. In the place of an even layer of proliferating cartilage, processes of this substance extend down into the ossified bone, and as the imperfect ossification continues islets of unchanged cartilage become isolated in the bony tissue.

The vascular medullary spaces are larger and more irregular than normal, while many undergo premature calcification.

The result of these changes is that on the diaphysial side of the epiphysial line new bone, soft and spongy in quality, superabundant in quantity, is laid down.

In the bone formed by the periosteum the same changes occur, the bone-forming layer is thickened, but the lime salts are deficient and the osteo-genic fibres few and far between.

Some people say that in this disease there is also a softening of bone already laid down.[16] This is not so. "In rickets there is a growth of soft bone, but no softening of healthy bone."[17] The mistake has probably been made by forgetting the anatomy of the formation of the medulla. As we saw above, at eighteen months there is present in a bone none of that osseous tissue that was there at birth, hence in a case of rickets which has begun early, if the bone be examined at the age of two years the whole bony tissue is rachitic in nature, a careless observer jumps to the conclusion that the old healthy bone has become spongy. The true explanation is that all of this old healthy bone has been absorbed in the growth of the medulla. If a bone in which the disease has not begun so early be examined, a thin layer of normal osseous tissue may be found immediately surrounding the medullary cavity.[18]

The ultimate changes in the shape of the long bones produced by rickets may be best studied by remembering the rule that the rate of growth of bony tissue is inversely proportional to the pressure upon it.

The shape of a bone as laid down in cartilage is but a rough sketch of the final structure, all the moulding and finer shaping is performed during the growth of the bone from the periosteum and epiphysial cartilage plates after the bones have begun to transmit the forces for which they are destined.

Now rickety bone is softer and more quickly growing than normal: hence it is more readily affected by the above law of growth than is healthy bone, and so we find that the final shape in these cases shows an exaggeration of all the moulding which the bone receives in its growth, and such a bone becomes a caricature, so to speak, of its true shape.

In other words, the changes in the shape of a bone as produced by rickets are an exaggeration of the normal curves of the bone.[19]

But this exaggeration of the normal curve does not cover the whole of the deformities caused hy rickets. The other position of bone formation besides the periosteum is the epiphysial line, and at the epiphysial line deformity, too, occnrs.

First we have the thickening just at the epiphysial lines, so well seen at the "wrist" or in the "beading"[20] of the ribs, this is simply due to the over-abundant growth of the cartilage extending out laterally beyond the level of the older, normal, and less prolific cartilage or bone.

Then there are other deformities which may be deduced from the above-mentioned law. Considering the lower end of the femur, the weight transmitted through the knee-joint passes almost entirely through the outer condyle of the femur and outer tuberosity of the tibia. Hence the more rapid growth of the internal condyle is increased in rickets and the growth of the external condyle is cut short; the same thing occurs in the upper epiphysis of the tibia, and knock-knee results.[21]

But it may be said, why, then, does bow-leggedness sometimes occur in rickets. This deformity is probably due not to changes at the epiphysial line, but to the alteration of the curves of the femur. There are in this bone three distinct curves, a lateral one from side to side, an antero-posterior one, and a spiral one with lower end twisted outwards. If the rickets come on early before the child can walk, the factor tending to cause knock-knee and an increase of the first two curves, viz., the weight of the body transmitted through the femora—is absent, but the last curve can develop unhindered, the knee looks outwards, and bow-leggedness results.[22]

Turning from rickets to osteogenesis imperfecta, we pass from a common disease to one which is distinctly rare, yet which is allied to rickets in so far as the changes in the growing parts of the bone are concerned. This disease has been variously termed fragilitas ossium, infantile osteo-malacia, and other names, and it consists in an extreme tendency to fracture of the various long bones of the body. In one new-born infant no fewer than one hundred and thirteen fractures were counted, in another case one hundred and six fractures occurred between the ages of two months and twenty-seven years. Union of the fractures is described as being very quick and in some cases good, while in others it was but a partial union. But little is known of the condition, the few cases that have been recorded differing widely in their aspects. There are in our Museum the bones[23] of two children which have been labelled infantile osteo-malacia. The one is

an infant in which there was some suspicion of congenital syphilis, the other a girl of about puberty, who must have been of very small stature, and who was repeatedly in the Hospital for some fracture.

Some recent observers[24] have published a careful account of an examination of a case, from which it appears that the growth of the cartilage at the epiphysial line is normal, but the conversion of this into bone, and the formation of the periosteal bone, are both abnormal. At the epiphysial line there is a direct conversion of cartilage cells into bone, and not an imposition by the osteo-blasts of bony tissue on to a cartilaginous basis as in the normal. The periosteal bone shows only an imperfect lamination and no Haversian systems, while the bone cells remain oval and do not send branches out into the canaliculi.

Besides these definite diseases of nutrition, the growth of the bone is influenced by its general nutrition independent of any disease. We see this in the tardy ossification that occurs in children who are the last to be born of a long family. A skiagraph of the hand at the age of five in the tenth child of its parents may reveal a state of development no more advanced than the ossification in the hand of a three-year-old child born among the first three.[25] We see it again in the atrophy from disuse; in a limb that has been affected with paralysis[26] the bones may undergo a retrograde change long after they have attained their full development, while cases of infantile paralysis with the tibiæ of the affected leg smaller than the other are comparatively common. The same is seen in the bones of a person bed-ridden from joint-disease.[27] On the other hand, the converse is seen in cases of hypertrophy of the fibula[28] after a non-union of a fractured tibia.

A bone ceases to grow in thickness some year or more after the junction of the epiphysis with the shaft, and the cells in the deepest layer of the periosteum are no longer osteo-blasts, but lie as flattened cells against the bone.[29] A small stimulus, however, is sufficient foe them again to take on the irregular shape of osteo-blasts and their function of bone formation. We see this in the hypertrophy of the periosteal bone in the concavity of a rickety curve,[30] in the hypertrophy of the bone secondary to inflammation,[31] and in the so-called expansion of bone by an endosteal sarcoma,[32] as well as in the compensatory hypertrophy mentioned above.

In all the inflammatory conditions of bone which lead on to suppuration, except those of localised periostitis, the source of origin of the trouble bears a definite anatomical relation to the epiphysial lines. Whether the case is one of acute panostitis, or a central abscess, an acute epiphysitis of infants, or a tuberculous joint secondary to bone, the spot where the disease starts is the same. The osseous tissue on the diaphysial side of the epiphysial plate is the youngest in the whole bone, and as such is more highly vascular. Here also in most bones important ligaments or muscles are attached, and so in any small injury—a sudden jerk of the muscles—a rapid twist of the joint—the greatest strain falls on this richly vascular bone, a small hæmorrhage occurs, and now at this weakened spot the micro-organisms in the blood settle down and start the inflammation.[33] The result depends on many factors, but the disease starts at this point except in those rare cases where it originates in the epiphysis[34] itself, when it starts in the newly-growing bone around the centre of ossification.

When the disease has once started, the relation of the periosteum to the epiphysial line, its firm attachment here, and its loose attachment to the diaphysis, prevent the disease from spreading to the joint unless it be one of those where the epiphysial line lies wholly or in part within the capsule. The epiphysial line itself also prevents the spread of the disease; this structure is more resistant to the inflammation than is the bone, and the disease tends to go round it[35] rather than through it. When it does do the latter the disease can be seen to spread out above and below, beyond the limits that it reaches in the cartilage.[36]

Syphilis also results in inflammatory bone conditions, and in congenital syphilis the bone affections come under the two heads of the growing parts of the bone,—periosteum and epiphysis. That which affects the periosteum is an inflammatory condition with much new formation, so that the bones become considerably thickened along the shafts or in parts. The new tissue laid down is described as varying in nature from the osteoid[37] growth which lies nearest the old true bone, and very closely resembles it in character, to the spongeoid growth further away which contains very little calcareous matter and is almost fibroid in nature. The result[38] of this change is a porous bone with the medullary cavity enlarged, a thick layer of porous osseous tissue surrounding, and here and there in the neighbourhood of the epiphysial line osteophytic outgrowths. The nodes[39] so formed in congenital syphilis differ from those in the acquired disease in that they are multiple and symmetrical, that they occur in the upper extremity as often as in the lower, that they do not occur on the head and clavicles, and that they are but little affected by potassium iodide, but may disappear spontaneously. At the epiphysial line an osteo-chondritis[40] occurs. An over-proliferation of the cartilage cells,[41] followed by calcification, irregular and very rapid, results in an osteo-myelitis which causes separation of the epiphysis and the pseudo-paralysis of infants. This osteo-myelitis occurs as a gelatinous degeneration[42] in the epiphysial line, and an infiltration with gummatous material of the vascular bone underlying the disc. Suppuration is not necessarily in this an antecedent to the separation, but when the changes above mentioned are well developed, separation may be seen to be beginning at one side of the bone between the disc and the adjacent diaphysis.[43]

Both these conditions, besides being anatomically related to the growing parts of the bone, may have some effect on the growth itself of the bone. Thus the first may cause an overgrowth or apparent hypertrophy,[44] and, in fact, Hutchinson says that if in a young person

a condition of the bones at all resembling osteitis deformans[45] be present, the case is probably one of congenital syphilis. On the other hand, by destroying the epiphysial plate, the osteo-chondritis at the end of the bone, without going on to suppuration or to separation of the epiphysis, may cause an arrest[46] of growth with some consequent deformity.

Turning from disease we find there is a whole series of injuries anatomically related to the growth of the bone.

1. Incomplete separation of the epiphysis.
2. Complete uncomplicated separation.
3. Separation complicated by some other injury.

Incomplete separation or juxta-epiphysial sprain includes those injuries that have already been cited as the predisposing cause to inflammation of bone. There occur fracture of the juxta-epiphysial line and separation of the periosteum on one side, and a crushing of this same spongy bone on the other, with extravasation of blood into the spongy tissue and under the periosteum. Thus if the thigh be forcibly abducted,[47] the bone beneath the inner side of the head becomes fractured, while the spongy tissue beneath the great trochanter becomes crushed, extravasation occurring at these two points.

Anatomically a complete uncomplicated separation may occur at one of two places :—

1. A pure separation which occurs exactly at the epiphysial line, where the cartilaginous plate is torn away with the epiphysis, but no bony tissue adheres to it.[48] This is the rarer kind.

2. A juxta-epiphysial separation when the fracture occurs through the zone of provisional calcification, Here again the cartilaginous plate is carried away with the epiphysis, but adherent to it is bony tissue either as a thin layer spread all over or as small isolated patches[49] here and there.

The complications which may accompany separation of the epiphysis are many and various; from looking at the specimens there seem to be more with some complication than without. The periosteum bears a very important relation to the anatomy of these injuries; firmly adherent as it is to the epiphysis, it does not become detached from this, but does become extensively stripped up from off the diaphysis to which it is always more loosely attached.[50] But for displacement mere loosening of the periosteum is not sufficient. The periosteum may be extensively stripped off from the diaphysis and yet no displacement take place,[51] so much so that the separation may not be recognised until the part is dissected, in fact many cases diagnosed as sprains in children are very possibly of this nature of injury.[52] But though the periosteum be stripped off the bone it does not become detached fuom the soft parts.[53] Hence a muscle really attached to the diaphysis may become left in connection with the epithysis by way of the periosteum adherent to this last. When displacement occurs, then there is also a rent in the periosteum and through this tear the diaphysis escapes.[54]

But there are other factors which enter into the question of displacement. The shape of the epiphysis is one. As mentioned above, most of the epiphyses are cup-shaped, and this tends to prevent displacement, while in those bones where the epiphysial line is transverse displacement more readily occurs. Again, the attachment of muscles is an important factor in displacement; where the attachment of some muscle crosses the epiphysial line so that it lies both on the diaphysis and epiphysis this acts as a splint to prevent displacement, but where some powerful muscle like the gastrocremius becomes detached along with the epiphysis it forms a potent factor in displacement.[55]

Of the complications which accompany separation, fracture is perhaps the commonest. Either epiphysis or diaphysis may be fractured, but the former[56] is rare. When the diaphysis is fractured this may occur as a separate fracture altogether,[57] so that some small comminuted piece of bone lies loose detached from both epiphysis and diaphysis, or the line of fracture may leave the epiphysial line[58] and pass off through the diaphysis so that a fragment of bone remains attached to the detached epiphysis.

Pure dislocation of a separated epiphysis is said to be a very rare complication,[59] but the partial separation of some epiphysis may occur with a dislocation, and this is best seen at the lower end of the humerus where one of the epicondyles becomes chipped off, associated with a dislocation of the elbow either partial[60] or complete.[61]

Beyond these more special points separation may be accompanied by any of those complications which occur with an ordinary fracture. The protrusion of either end through the skin, malposition, suppuration, pressure symptoms, or necrosis of bone may all occur, this last more frequently, perhaps,[62] owing to the stripping up of the periosteum. But there is one ultimate result which occurs more often with a separated epiphysis than with an ordinary fracture, and that is arrest of growth. That it does occur even with a fracture though the shaft is shown by a specimen[63] in our Museum of two humeri, one of which shows arrest of growth from a fracture which occurred probably at the age of eight years. But with separation of the epiphysis the growing part of the bone itself is in danger, and if it be seriously damaged the whole longitudinal growth of the bone is stopped and deformity results.[64]

Such is a brief outline of the growth of a long bone, and of some of the anatomical points connected with this growth which bear on injury and disease.

Note.—Spec. 1105[20]. The above interpretation of this specimen is that of Mr. John Poland (*ibid.* p. 260), who originally put it up. The revision of the catalogue has not yet reached this part, but there appears to be some doubt in the minds of the revisers as to this being the correct interpretation, for a note has been pasted on the case thus : "? Separation of epiphysis, ? Fracture."

REFERENCES.

1 Vide Specs. No. A 107–108. Phys. Series. Royal Coll. Surgs. Museum.

2 No. A 78. Phys. Series. Vide Palmer's Edition of Hunter's works. Vol. 4, p. 315.

3 No. A 79. Phys. Series.
4 Philosophical Trans., 1736. Vol. 39, p. 287.
5 Specs. Nos. A 97–108. Phys. Series. In many the colour is now lost, or very faint. No. A 105 still shows well.
5a Vide note b, by Owen, on p. 318, vol. 4 of Hunter's works.
6 Vide Quain's Anatomy. Vol. 2, Fig. 110; also Spec. No. A 160. Phys. Series. R. C. S. M.
7 Vide ibid. Spec. A 173 for lower end of femur, upper end of tibia. Spec. A 146 for upper end of humerus, both ends of radius, both ends of ulna.
8 Traumatic separation of the epiphyses. Poland, p. 800.
9 Ibid. p. 471.
10 Ibid. p. 458.
11 Ibid. pp. 167–168
12 Ibid. p. 615 et seq.
13 Erichsen's Surgery. Vol. 2, p. 304.
14 Hutchison. "Diseases of Children," p. 109.
15 Erichsen. Vol. 2, p. 304.
16 Hutchison. "Diseases of Children," p. 110.
17 Erichsen. Vol. 2, p. 304.
18 Vide Spec. 1105, G. H. Mus., in the ulna; also Erichsen's Surgery, Fig. 524.
19 Vide Museum Specimens passim—generally best seen in the femora. 1000^{10}, G. H. M.
20 Spec. $-/03^{21}$, G. H. M.
21 The increase of the lateral curve of the femur also enters into the formation of knock-knee. Erichsen, Vol. 2, p. 541. See also Thomson and Miles' Surgery, Vol. 1 (2nd ed.), p. 204.
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23 Spec. $1000^{26\text{-}30}$. Insp. 204, 1882, and Specs. $1000^{37\text{-}39}$. Insp. 220, 1883.
24 Osteogenesis Imperfecta. Lovett and Nicolls. B. M. J., 13/10/06, p. 915.
25 Vide a series of skiagrams in traumatic separation of epiphyses, by John Poland, p. 28.
26 Spec. 1000^{16}, G. H. M.
27 Specs. 661, 661a, R. C. S. M.
28 Spec. 1268, G. H. M.
29 Erichsen. Vol. 2, p. 256.
30 Spec. 1214^{20}, G. H. M.
31 Spec. 1244^{50}, G. H. M., etc.
32 Spec. 1255, G. H. M.
33 Specs. 1334^{78}, 1155^{30}, G. H. M.
34 Spec. 1102^{5}, G. H. M.
35 Spec. 1239, G. H. M.
36 Spec. 1245^{50}, G. H. M.
37 Syphilis and local contagious diseases. Berkeley Hill and Cooper (2nd ed.), p. 349.
38 Vide M. Jules Parrot's specimens in the R. C. S. M., Nos. 721–724.
39 Hutchinson's illustrations of Clin. Surg. Vol. 1, p. 45 and plate 9; also Mr. Symonds' Surg. Rept. for 1904, No. 427.
40 Spec. 1244^{60}, G. H. M.
41 Hill and Cooper. Ibid, p. 350.
42 Spec. 725C, R. C. S. M.
43 Spec. 725D, R. C. S. M.
44 Syphilis. J. Hutchinson, p. 440. Commentary No. CCXIV.
45 Ibid. P. 453. Commentary No. CCXXV.
46 Ibid. P. 441. Commentary No. CCXX.
47 Vide a picture after Ollier in Poland, p. 78.
48 Spec. 1210^{65}, G. H. M.
49 Specs. 945A, R. C. S. M., 1210^{45}, G. H. M.
50 Specs. 1041C, 956 E, R. C. S. M.; 1117^{42}, G. H. M.
51 Spec. 1041D, R. C. S. M.
52 Poland, p. 82.
53 Hutchinson's Ill. Clin. Surg. Vol. 2, Plate 40, and Figs. 6, 7, 8, pp. 1 and 2; also Spec. 1210^{46}, G. H. M.
54 Specs 956B, 956E, R. C. S. M.; 1117^{42}, G. H. M.
55 Specs. 1041E, R. C. S. M.; 1210^{46}, G. H. M.
56 Specs. 1041D, R. C. S. M.; 1210^{68}, G. H. M.
57 Spec. 954E, R. C. S. M.
58 Specs. 940A, 1041A, 1041B, R. C. S. M.
59 Poland, ibid. pp, 84, 429.
60 Spec. 945A, R. C. S, M.
61 Spec. 1306^{12}, G. H. M.
62 Ill. Clin. Surg. Vol. 2, p. 3.
63 No. 1105^{20}. See note at end of paper.
64 Spec. 956A, R. C. S. M.

Novelties.

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Pass List.

University of Cambridge, December, 1906.—Third Examination for Medical and Surgical Degrees.—Examination for Degree of Master of Surgery.—E. C. Hughes, Clare. Part II., Surgery, Midwifery and Medicine.—F. A. Barker, Emm., A. S. B. Bankart, Trin., G. W. Goodhart, Trin, P. P. Laidlaw, John, B. K. Nutman, Jesus, C. H. Rippmann, King's. Part I., Pharmacology and General Pathology.—H. B. Carlyll, John, B. H. Palmer, Pemb., R. R. Walker, John. Second Examination for Medical and Surgical Degrees.—H. L. Attwater, L. Bromley, H. L. Duke, W. Ledlie, H. F. Percival, V. T. P. Webster.

University of London.—M.D. Examination, December, 1906.—Branch I. (Medicine), John Evans, B.S., W. N. May, B.S., John Owen, G. W. Russell, B. H. Wedd. Branch III. (Mental Diseases and Psychology), S. J. Ormond. Branch IV. (Midwifery and Diseases of Women), A. B. O'Brien, H. D. Smart.

Injuries to the Orbit.

CLINICAL LECTURE BY Mr. ORMOND.

Gentlemen,—I was lately asked to see a case in consultation, in reference to an injury to the orbit, the result of an accident.

The patient, a man rather past middle life, was at work in his garden one afternoon in last July, putting in stakes to support some chrysanthemums. He had two sticks in one of his hands, one stick with which he supported himself being five to six feet long, the other a smaller one, similar to those prepared sticks with which gardeners often stake their plants; the larger stick gave way and he fell forward, driving the smaller one into his right orbit. He previously had had the misfortune to lose his left eye, and his friends, on ascertaining what had happened to him, thought the injury sufficiently severe to justify them in sending for a medical man, although the patient made light of the accident. The doctor on his arrival noticed that there was considerable proptosis of the eye and a small wound on the inner and upper side of the orbit. The patient stated that he had himself withdrawn the stick from its position and was surprised at the depth to which it had penetrated; a gush of blood had followed the withdrawal of the stick. The patient's general condition did not give rise to any alarm, and the doctor left him in order to telephone to me, afterwards going to see some other patients. On my arrival at the station some two or three hours afterwards he met me, and said that he had heard the patient was much worse; before we left the station a messenger arrived to say he was dead. Without a doubt the stick had penetrated the dura mater, bleeding had taken place within the cranial cavity leading to death from compression.

Injuries to the orbit may be very slight, or, as in this case, they may prove fatal within a short time. The importance of these cases, the necessity for the greatest care in examining such wounds and ascertaining their direction and extent, are my reasons for bringing this subject to your notice. It has been stated that 90 per cent. of cases of penetrating wounds of the orbit end in death; this figure is probably too high, and certainly with our present knowledge should be materially reduced. Berlin reports that out of fifty-two cases of perforating wounds of the orbit forty-one proved fatal. Hulke, referring to these cases, says "of brain symptoms there may be none. Two or three days may pass over during which the patient goes about as usual; then brain symptoms make their appearance, sometimes suddenly, and the patient dies in the course of a few hours or days, and the true nature of the case is revealed only by the post-mortem examination."

Fracture of the orbital bones may be due to direct or indirect violence; when they are the result of direct violence they are generally caused by bullet wounds, penetrating wounds, or injuries in which the skull or face are crushed; when they are the result of indirect violence they are due to the anterior fossa being involved in a fracture of the base.

The results of indirect violence may not be apparent at once, the damage being recognisable only during the progress of the case. Direct or indirect injuries to the orbit and orbital tissue may give rise to emphysema of the orbital tissue, hæmorrhage into the orbital subconjunctival or subcutaneous tissue, proptosis, interference with vision, damage to the muscles, nerves or vessels or the lachrymal gland, inflammatory mischief or cerebral complications.

The orbit has air-containing cavities on three sides—the frontal sinuses above, the nasal cavities on the inner side and the antrum of Highmore below. A fracture involving any of these surfaces might result in emphysema. Emphysema is the infiltration of the cellular tissue with air; it generally starts as a swelling of the soft tissues on the inner side of the orbit and spreads outwards into the lids, pressure on it causes a sensation of fine crepitation; this swelling sometimes produces exophthalmos which is more or less easily reduced by direct pressure; usually, however, it only forms a soft puffy swelling of the lids. A similar condition sometimes follows a too forcible use of the lachrymal probe, which has torn the mucous membrane of the lachrymal canal. If the patient blows his nose, a thing he is very likely to do if he finds that it is bleeding, the air is forced into the cellular tissue directly from the nasal cavity. An emphysematous condition of the orbital tissue has also been described as a result of sneezing and other violent expiratory acts; these cases probably result from defects in the bony wall of the orbital cavity.

Hæmorrhage into the orbital tissue is rendered easy by reason of the extreme looseness of the cellular tissue, the delicate, almost fluid condition of the fat, and the presence of large lymph spaces. Protrusion of the eyeball from this cause may be extreme, even sufficient to dislodge the globe and force it beyond the lids; direct pressure makes little or no effect on the swelling, which may occur rapidly. I have

watched the eyeball protrude several millimetres in a few seconds as the result of hæmorrhage into Tenon's capsule. Subconjunctival ecchymosis may be a symptom of indirect fracture of the orbit; in such cases hæmorrhage appears first near the equator of the globe, and spreads in a forward direction, the hæmorrhage being triangular in shape, with its apex forward; on the other hand, an ecchymosis due to a rupture of the anterior conjunctival capillaries has its base near the cornea and its apex directed backwards.

Proptosis, or protrusion of the eyeball, in cases of injury may be caused by the presence of air, blood, or inflammatory products.

By reason of the S-shaped curve in the optic nerve, and the elasticity of the muscles, the eyeball may protrude some distance, but if the protrusion is so great as to prevent the cornea from being covered by the lids it will suffer considerable injury.

There was in the ward a short time ago a case in which the globe was forced outside the lids. In such circumstances it is essential to remedy the condition quickly. Slight degrees of proptosis are sometimes difficult to diagnose, and are best estimated if one stands behind the patient, who should be seated, and compares the two sides when viewed from above.

Limitation of movement, even to immobility of the whole globe, may result from proptosis.

Enophthalmos—a retraction of the eye as opposed to proptosis or protrusion of the eye—may occur if the superior maxilla is smashed and the eyeball in consequence is driven into the antrum of Highmore.

Cases of enophthalmos following traumatism due to a paralysis of the orbital muscle of Müller, have been described. These types of traumatic enophthalmos usually recover.

Interference with vision.—Injuries to the orbit may of course involve the eyeball itself, in which case vision is impaired; but beyond these cases there are also those in which the globe is not directly injured and yet blindness may supervene. We are only concerned to-day with these latter.

Blindness as a consequence of injury to the orbit may follow immediately after the injury or after a lapse of time; those cases in which it follows immediately may be divided into two classes—

1. Those in which the blindness is permanent.
2. Those in which the visual acuity improves with time.

A case of complete and permanent blindness of one eye was in the ward in 1904. A lad, aged 16, was bicycling and fell, thereby injuring the right side of his head; on recovering consciousness he could not see with his right eye; the nerve itself was the seat of the lesion, as evidenced by the absence of the pupillary reflex and the gradually developing pallor of the optic disc. Von Holde found that in one hundred and twenty-four cases of fractured skull eighty-six had fractures of the base—in seventy-nine of these the fracture involved the roof of the orbit and in sixty-three a fissure or fracture ran through the optic foramen.

The reason that improvement takes place in certain cases may be accounted for by the fact that blood is extravasated into the optic nerve-sheath, and the subsequent absorption of all or part of the clot allows the nerve fibres to recover their function.

When the vision fails gradually, sometime after the injury, the nerve is probably involved in organising blood-clot or callus.

Injuries to the orbit may give rise to rupture of the extrinsic muscles of the eye; there is in the ward now a boy suffering from ptosis, following after an accident. If several muscles are ruptured, the eyeball may be forced between the lids, as in a case under Mr. Brailey's care two or three years ago; also a forcible evulsion of the eye sometimes occurs in the newly born, as the result of the application of forceps. I believe that amongst the Arabs there exists a species of punishment which takes the form of an evulsion of the eye by means of pressing the thumbs into the orbit.

In reporting two cases where the nerves suffered, from injuries to the orbit, Berlin states that the actual division of the motor nerves must be extremely rare, for he could find none such mentioned in literature; it is not, however, so uncommon to receive a history of traumatism in cases of diplopia, where no other cause can be attributed. The infra-orbital nerve is very liable to be damaged by fracture of the superior maxilla, as is also the branch of the third nerve supplying the inferior oblique muscle. Hæmorrhage into the sheath of the muscle may interfere with the action of the muscle, the nerve being unaffected. Besides hæmorrhage, injury to the vessels of the orbit may be followed, either immediately or after a lapse of time, by the condition known as pulsating exophthalmus. This is characterised by protrusion of the eyeball, dilatation of the vessels of the conjunctiva, presence of peculiar audible noises over the region of the orbit, and also over a more or less extensive region of the skull, pulsation which is lessened or removed by compression of the common carotid. The symptoms may be

the consequence of an aneurysm of the ophthalmic artery, or of the internal carotid in the cavernous sinus or a communication between an orbital artery or vein. A case of this nature has recently been in the ward, and was treated by ligaturing the common carotid.

The lids may be torn or distorted either by cicatricial contraction or direct loss of substance, and ectropion or entropion may result. The lachrymal gland has been dislocated by traumatism, but the accident is a rare one, owing to its protected position in the outer part of the orbit.

If the cellular tissue is injured by a septic wound, orbital cellulitis may ensue and may end in suppuration and the formation of an abscess. The symptoms of this condition are pain in and around the orbit, swelling of the lids, œdema of the conjunctiva, proptosis and a rise of temperature. In mild cases—or those cases which are properly treated—prognosis is favourable, but in severe cases of the acute type fatal symptoms may follow if the inflammatory condition reaches the brain.

There are, however, symptoms of much graver moment than those we have so far considered, and they are those which denote that the cranial cavity has been penetrated. As Mr. Hulke pointed out, the brain symptoms may be delayed many days, the patient—and very often the doctor also—being quite unaware of the seriousness of his condition. Injuries to the inner side of the orbit frequently cause death owing to the paper-like thinness of the bones in this part and the ease with which pointed instruments can reach the brain.

In connection with injuries of this nature it is interesting to remember that Henry II. of France died from an accident of the kind. On the occasion of the marriage of Philip II. of Spain with Isabella of France (Paris, June, 1559), the king, tilting with Count Montgomery, received an injury to his left orbit. Paré, who was one of the surgeons in attendance, thus describes the result of the accident:—

"He having received so great a stroak upon his Brest that with the violence of the blow, the vizour of his helmet flew up and the trunchion of the broken lance hit him above the left eyebrow, and the musculous skin of the Forehead was torn even to the lesser corner of the Left Eye. Many splinters of the same trunchion being struck into the substance of the fore-mentioned eye, the bones being not touched or broken, but the Brain was so moved and shaken that he dyed the eleventh day after the hurt. His skull being opened after his death, there was a great deal of blood found between the Dura and Pia mater, poured forth in the part opposite to the blow, at the middle of the suture of the hind part of the head, and there appeared signs by the native colour turned yellow, that the substance of the Brain was corrupted as much as one might cover with one's thumb." Workes of Ambroise Parey, 1665.

A list of instruments which have been mentioned at various times as being the cause of perforating wounds of the orbit would be a long one; the most common are foils, walking-sticks, umbrellas, pipe stems and pencils. The orbit may conceal large foreign bodies, and their presence be quite unsuspected by the patient or doctor; the size of some of them when removed has been quite remarkable. Beaumont reports a case in the *Lancet* of 1862, in which he states that a piece of wood five and a half inches long by four-tenths of an inch square was removed successfully; and Mr. Higgens published a case in which the blade of a penknife had been imbedded in the orbit and frontal sinus for forty-six years, the patient not having the slightest suspicion of its presence there.

Ambroise Paré recounts that he removed a spear-head from the orbit and face of the Duc de Guise (Balafré), which was so firmly embedded that, in order to get better purchase for the proceeding, he had, after he had obtained permission from the Duke, to place his foot upon the patient's face and wrench it out with a pair of smith's pincers, specially made for the purpose. The Duke made an uninterrupted recovery.

Many of the foreign bodies that lodge in the orbit are opaque to the X-rays, and a means of detecting their presence and localising them has been described by Mackenzie Davidson, and recorded by him in the Transactions of the Ophthalmological Society, 1898—1899.

Gun-shot injuries to the orbit.—The orbit has often been injured by gun-shot wounds, and the lodgment of a bullet within it has sometimes led to little or no disturbance. I have myself removed a leaden bullet from the lower and anterior part of the orbit which has remained embedded for over a fortnight quite unknown to the patient. Bullet injuries resulting in blindness formed the subject of a paper by Mr. Nettleship reported in the Transactions of the Ophthalmological Society for 1901; in some of these cases the damage was due to the bullet passing through the orbit itself; in others the injuries to the orbit were indirect. Damage of various kinds to muscles and nerves resulted, but the most interesting are those described as indirect injuries to the eye, in which the passage

of a bullet through some part of the orbit was followed at once by hæmorrhage in the eye, resulting from rupture of the retina and choroid, although there was no sign that the sclerotic itself was touched.

These indirect injuries as the result of gunshot wounds are of interest because of the bitter feelings aroused in recent wars by the reported use of explosive bullets, contrary to the Convention held at St. Petersburg some years ago. At short range bullets of high velocity produce such extensive and wide-spread damage, as to resemble closely the effects of an explosion. In a case recorded by Mr. Nettleship, a wound of the left orbit by a Mauser bullet at fifty yards range, following a path at no time passing nearer the sclerotic than six millimetres, produced a rupture of the choroid in the outer side. Numerous similar cases have been recorded by others.

Colonel Stevenson, in his book on "Wounds in War," says that bullets travelling at high rates of velocity produce crushing and attrition of the tissues directly and indirectly; directly by the immediate action of the bullet itself, and indirectly by the communication of a part of its energy to the solid and liquid particles which it displaces. Stevenson's experiments show that if a vessel made of lead, shaped like a jam pot, is struck by a Lee-Metford bullet (cordite cartridge), single entrance and exit holes are made if the vessel is empty; if, on the other hand, the vessel is filled with water, the vessel is shattered to pieces. The evidence of Colonel Stevenson's experiments is preserved in Netley, but you can carry out the same experiments yourselves with a rook rifle. We must conclude, then, that a bullet passing through the orbit acts as if it were passing through a vessel filled with fluid, and the force of the projectile is partly changed into vibrations which radiate in lines from the long axis of the bullet tract, and, as Professor Stevenson puts it, they act as separate missiles, and produce rupture of the blood-vessels of the retina and choroid.

Treatment.—Every wound of the orbit and orbital tissues, however slight, should be very carefully examined, the history minutely investigated, and the exact nature of the instrument causing the wound ascertained. Even slight wounds may lead to serious trouble if septic or allowed to become septic. Cellulitis of the orbit following septic wounds has proved fatal in many cases, and unless great care is taken the presence of a foreign body within the orbit may be entirely overlooked. Free drainage is the one principle that must be ensured in these conditions. If there is any doubt, the X-rays should be used to ascertain the presence of any foreign body of a metallic nature. Extreme proptosis consequent on rapid hæmorrhage into the orbital tissues may lead to a loss of the eye, simply from exposure.

Sometimes the eyeball is forced beyond the margins of the lids, and it is necessary to enlarge the palpable fissure by external canthotomy. The optic nerve under such conditions is severely stretched, its natural S-shaped curve is lost, and soon irreparable damage ensues; the exposed cornea turns opaque, ulcerates and sloughs, thus leaving the contents of the eyeball quite unprotected. Every effort should be made, therefore, to keep the globe within the lids and to prevent as far as possible the proptosis from becoming extreme. An incision into the swelling and the turning out of a blood clot are not usually very successful, but leeches will sometimes be of use, and if patients can support it, firm bandaging should be tried. Where the wound has been a perforating one, and it is feared that the cranial cavity has been entered, the direction and depth of the wound should be ascertained, and if it is quite certain that the cranial cavity has been penetrated, the wound should be treated as you would treat a perforating wound of the skull anywhere else, that is to say, trephining should be performed. The trephine hole should be made having regard to the direction of the wound and the probable position of the damage to the brain, and should be above the orbit and not through the orbit. *i.e.*, the skull should be entered through the frontal or temporal bones. In this way it will be easy, by lifting the frontal convolutions, to examine the inner surface of the orbital plate of the temporal bone, remove any particles of bone pressing into the brain and drain the damaged area not only through the orbit, but also through the trephine hole. In all cases of fracture of the orbit, the patient should be kept in bed, the temperature and pulse watched, and the greatest care taken to record any symptoms which may indicate serious brain complications. The ends of the ruptured muscles should be sutured together when practicable, but this is not usually possible, and often I find it better to allow the wound to heal and the swollen and damaged tissue to recover by itself before attempting any interference. In a case I have in the ward now where the tendon of the Levator Palpebræ Superioris was severed. I have since fixed the drooping lid to the tendon of the Superior Rectus with satisfactory results.

Clinical Notes.

At Mr. Rowland's Surgical Out-Patients'.

Case I.—F. 61. Patient presented a solitary nipple-shaped tumour on her right cheek, on a level with, and just outside, the right ala of nose. Its base was the size of a sixpennypiece, and it projected half an inch from the surface. It was uniformly red in colour, like the cheek; its surface was smooth and shining, and it was not ulcerated. To the touch it was firm and not fluctuating. A small scab on its surface having been picked off, a red, warty-looking, non-purulent surface was exposed, from which a little blood-stained serous fluid trickled. The skin was not markedly adherent over the tumour, and it moved freely upon the deep structures. The submaxillary lymph glands were palpable on both sides, those on the right side being the larger. Patient said the tumour had been present three weeks, and started as a pimple. It was not very painful.

Diagnosis—

i. Being inflamed and of large size was against it being a simple wart, as also were the glands.

ii. Being non-purulent, and showing no cavity nor membrane within, was against suppurating sebaceous cyst.

iii. Its projection from the surface and warty appearance, with the absence of an inflamed base, central necrosis and surrounding vesicles, were against anthrax.

iv. There not being destruction of tissue, but the reverse, and its moist appearance, were against rodent ulcer.

v. Mr. Rowlands thought the history ought to be neglected, and in view of the tissue increase and large, hard submaxillary glands, with the previous considerations, diagnosed epithelioma.

Case II.—H. 58. A blacksmith. For eighteen years he had not walked without crutches, owing to an old Pott's fracture of both legs, which had left him with double talipes equinus. He had diabetes, and friction had produced hæmorrhagic blisters over the heads of his metatarsals, which had given place to long, deep, excavating ulcers, doubtless of diabetic association. He had been successfully treated with firm rubber casts, shallow in front and deep behind for the heels, with which he had walked quite well without crutches. In addition to diabetes, he had very large gouty deposits on the backs of his hands and on the dorsum of his feet, some as large as a florin, and gouty tophi in both ears.

Case III.—H. 19. Presented an enlargement of his left testicle. The tumour was as large as a duck's egg, was uniformly smooth and firm to the touch, was very tender and extremely heavy. There appeared to be no effusion into the tunica vaginalis. The epididymis did not appear to be affected; the left spermatic cord was not thickened. He had not got a urethal discharge, but on the left side of the body of the penis, two inches from the top, the skin presented a hard chancre, with indurated base, about the size of a threepenny bit. Its surface was scabbed. Patient said that he had had this latter "for months," but that the swelling of testicle came a week ago. He had had a bad sore throat, but had never had a rash. No rash was found on his body. Mr. Rowlands diagnosed a secondary syphilitic testicle, remarking that this was a late secondary lesion, and that chancres on non mucous surfaces were scabbed.

Case IV. A fat boy, aged 6, with the large square head of rickets. Both his feet showed extensive talipes valgus; both knees showed marked genu valgum; both hips coxavara. The femora showed an exaggerated antero posterior curve most marked below. The tibiæ showed a well-marked antero posterior curve, chiefly below and convex to the front. The lower ends of the Radii showed thickening.

Case V.—Infant, 6 weeks, presented a nodule rather larger and flatter than a pea, situated on the right side of the scalp, just above the auricle, and below the right temporal ridge, apparently immediately superficial to the squamo-parietal suture. The skin moved freely over it, but it seemed attached to the deeper structures. It was not thought to protrude as the child cried, and the diagnosis was between fibroid nodule and dermoid cyst, the latter being favoured. Others thought that the tumour bulged as the child cried, and favoured meningocele, but these latter are usually in the middle line. In some rare cases (Bowlby) the bone beneath dermoid cysts of the scalp is deficient, the tumour lying directly on the dura mater, and in some cases attached to it. Hence if it did bulge with crying, it might have been a dermoid cyst.

A. N. L.

Guy's Hospital Debating Society.

The Seventy-sixth Ordinary Meeting of the Society was held in the Smoking-room of the Club on Saturday, December 15th, and was chiefly remarkable for the number and excellence of the speakers. Thirty members were present, many of whom brought with them large histories and chronological tables.

The minutes of the last meeting were read and confirmed.

Mr. D. Reynolds complained that more notice of the meetings had not been given, particularly in the Gazette. Was the Society of less importance than the advertisements of patent foods?

The Chairman then called on Mr. Adams to propose the motion before the House, viz,: "That this House disapproves of the present system of party government and is convinced of the practicability of some better method."

Mr. Adams began his speech by tracing the history of the development of party government. He deplored the

lack of individuality brought about by the system, and declared that the greatest benefactors of the race had been eccentric and not party men. He thought it quite possible that a minority might be in the right (a comforting idea in view of after events). The greatest preachers were those who did not say what they meant, nevertheless he thought it was desirable to speak the whole truth. Party politics had ruined the empire and our prestige in foreign countries was lost. An empire divided against itself could not stand. Union was strength. Let the House consider "the husband and wife theory." They might practice party politics and have differences among themselves, but they united against children. Socialism would not do, nor would autocracy. He proposed a third alternative, viz.: an upper house run on non-party lines, and a lower one constructed as the House of Commons now.

Mr. GREENE, who opposed the motion, wished to discuss it chiefly in reference to England. Although parties may change there were always permanent non-parliamentcry officials who managed the various departments. He had never heard of bribery and corruption in England. The majority in Parliament represented the majority of the people. The House of Lords restrained the Commons, and recently another restraining factor had arisen in the shape of the Labour Party. The present Government was in power because everyone was tired of Mr. Balfour. National expenditure was kept down by the system of party politics. Had Mr. John Burns sold his conscience? (Mixed cries.) Eccentricity was not stamped out; he himself had seen red ties, felt hats, and Norfolk jackets in the House.

Mr. RAY EDRIDGE seconded the proposition, and commenced by stating that he desired to quarrel with everyone because he had never heard of such a disgracefully uninteresting motion. He then proceeded to make an impassioned appeal for women's suffrage. The Honorable Opposer looked intelligent, but he was not. He, the speaker, advocated that man should give up his place to woman. What then would he find to do? Well, he could sit still, and think, and smoke, he could dress beautifully, and he could become a good father. Miss Pankhurst was an intimate friend of his and he assured the House that no one could tell a racier story over a glass of wine.

Mr. BALL, scorned frivolity, and said he rose to oppose the Hon. Proposer and not his Seconder. He also said that it was such absolute rot, Non-party politics would lead to very frequent elections, and at each of them the man with the most money would get in. The Upper House was not run on party lines and therefore the Hon. Proposers ideal was realised for him at present.

Mr. T. T, O'CALLAGHAN said that words had done more harm to people and thought than anything else. He made a rather lengthy speech, and advocated that government should be vested in a committee of the strongest men of both parties.

Mr. HEASMAN did not understand the last member. He felt sorry for the Hon. Proposer and Seconder. If there were no bribery and corruption how should we know that such things existed?

Mr. NEVILLE COX regretted that the motion contained both a destructive and constructive clause. Many people were Conservative merely because it was genteel to be so. Religious differences were deplorable.

Mr. HENRY agreed with the seconder of the proposition. Many people said they could work better if they smoked; personally he found that he could smoke better if he did not work.

Mr. REYNOLDS did not conform to the customary form of addressing the House, and adopted a Napoleonic attitude, called an interrupter "a jack-in-the-box" and proceeded with his speech. He enumerated the various parties. The lack of education in the Borough was appalling. He had been there recently and he knew. He advocated an absolute monarchy.

Mr. SCOTT agreed with all the objections raised against Party Politics, but what alternative was there?

Mr. BROOKHOUSE said that Party Government was as much a result of evolutionary processes as anything else. Whatever its faults might be, it was therefore impossible to go back to any previous form. He had no idea which way to vote.

Mr. STOUT. Parties were governed by groups from above. The Unionists were an example of this bad practice.

Mr. DIGBY took up Mr. Brookhouse's remark concerning evolution, and pointed out that the process was still going on, and we might therefore hope for something better. He detailed a somewhat complicated scheme of government, the blame for which he put on Mr. H. G. Wells.

Mr. GREENE replied to some of the Hon. Member's remarks. He pictured Mr. Ray Edridge at tea on the Terrace with Miss Pankhurst.

Mr. EDRIDGE nervously remarked that principals were expected to get to the point.

Mr. GREENE retorted that seconders were expected to keep to it. Unbiassed men, such as Mr. Digby had depicted, were not to be found.

Mr. ADAMS was optimistic. All the arguments brought forward had been in his favour, none against.

The CHAIRMAN recapitulated the arguments and put the question to the vote.

The motion was lost by 13 votes to 11.

Mr. ADAMS proposed a hearty vote of thanks to Mr. Ormond for taking the chair.

The House then adjourned for coffee.

Change of Address.

Mr. W. H. Bowen, M.S., F.R.C.S., from 27, New Cavendish Street, to 60, Harley Street, W.

(The Editor will be very glad to receive a postcard with notes of any change of address.)

Reviews.

The price of books submitted for review should in every case be stated.

Lectures on Diseases of the Lungs. By James Alexander Lindsay, M.D. Second Edition. Pp. 508 and x. (Baillière, Tindall & Cox.) 10s. 6d. net.

The first edition of this book, which came out a few years ago, contained lectures on Diseases of the Heart and Lungs; in the present work the former have been omitted, and the latter have been extensively re-written and increased in number. The object and scope of these lectures is, we consider, ideal—the author intends them to supplement the ordinary text-books, they emphasize those points which he considers most important, indicate the different opinions which he has formed as the result of his experience, and add any minor details of technique which he has discovered. An especial feature is made of differential diagnosis, which obviously a lecturer describing any particular disease can easily set out very fully, but which would involve an enormous amount of repetition if every disease were so treated in a text-book. In the same way the lecturer's treatment of the subject is thrown into the form of a discussion, with suggestions and their contradictions, while dogmatism is avoided as being more appropriate to and often necessary in a text-book.

A very fair chapter on Radiography in Diseases of the Lung is given, and the remarks on the surgical treatment of various affections are very sensible. A large amount of information is given concerning the efficacy of a visit to many well-known health resorts, but we should like to draw attention to various omissions in the text.

Under Croupous Pneumonia we certainly expected to find some mention of arthritis and peritonitis as complications, and also some indication of the fact that all physicians do not agree with Dr. Lindsay when he describes fibroid lung as an important sequela of croupous pneumonia. Under the differential diagnosis of Bronchiectasis we are not told that tuberculous sputum is never fœtid, nor is fibroid lung given as a cause of Bronchiectasis. We cannot agree that in the air hunger of diabetic coma "the rate of respiration may be normal or decidedly increased," as the usual characteristic is its marked slowness. We are glad to see mention made of the slight œdema often present in the chest-wall over an empyema, and can recommend the book as containing an interesting series of lectures.

Clinical Lectures on Neurasthenia. By Thomas D. Savill, M.D. Third Edition. Pp. 216 and xvi. (Henry J. Glaisher.) 7s. 6d. net.

A fresh edition of these lectures has been called for, and Dr. Savill has taken the opportunity to make several alterations and additions to the eight lectures of which a second edition was published in March, 1902. The clinical picture presented in these pages of that complex of symptoms which we know as neurasthenia is accurate and instructive, though perhaps not well balanced, as the author, in our opinion, unduly exaggerates the important symptoms which make for recognition of his theory of the pathology of this disease.

Dr. Savill considers that neurasthenia is due to an auto-intoxication—"that blessed word Mesopotamia"—which arises in the gastro intestinal disorders so common in sufferers from this disease. The principal arguments adduced seem to be that dyspepsia is associated with neurasthenia in very many cases; and as it usually precedes the other symptoms, the author seems to think it must be the cause, especially as after treatment of the dyspepsia the other neurasthenic symptoms clear up.

The book is interesting, however, to all readers, whether they accept the author's views or not, as it contains the results of the observation of many cases, and gives an exceptionally clear description of the diagnosis of neurasthenia, comparing it with hysteria and hypochondriasis—two diseases which are so often mistaken for it.

Guy's Physiological Society.

An ordinary meeting of the society took place on December 3rd. A paper was read by Mr. H. Catto on Nervous Activity. Experiments were mentioned and observations brought forward to prove that the cerebral nervous system was not of necessity essential for the manifestation of the phenomena known as Reflex Actions; but it served the function of being a more rapid and easy means of communication between sensory surface and contractile tissue. Several examples of instincts were dealt with. One of very many interesting examples of reflex actions was the contraction of the pupil on exposing to strong light. The retina is stimulated by the light, the stimulus passes through the optic nerve to its centres, from there by the motor oculi to the sphincter of the iris which contracts. The conclusion may not be drawn that the centre plays another part than serving as a means of communication between the surface stimulated and the muscle, and that the centre possesses the germ of consciousness which we are ready to grant to the cells presiding over reflex acts. For in the excised iris the pupil still contracts when the light strikes the former. In sharks, whose brain has been removed, it was found that light caused contraction of the pupil, some hours after death. The nervous system, therefore, so far as it is concerned with reflex and instructive acts, is merely a specially developed portion of originally undifferentiated protoplasm whose duty is to put sensory surfaces in communication with contractile tissue and enable the animal to react more quickly, as a whole, to external stimuli, and to adapt itself more easily to its surrounding.

A long discussion followed. Later on two members got into an argument, which was termed by the chairman a "tête-a-tête." It was interrupted at length amid great applause by Mr. Neville-Cox asking permission to ask a question which, however, related to the evening's subject. The meeting closed with a vote of thanks to Mr. Cameron for occupying the chair. Forty-nine members of the society were present.

W. L. HIBBERT, Hon. Sec. and Treas.

In Lighter Vein.

FRUGES NOCTURNÆ.

Scene: *A sunny interior. Breakfast laid. A bright fire burning in the grate. Sitting at the head of the table a comely lady.*

Enter her husband, Dr. John Gray-Giddy, a general practitioner. He has a puzzled look about his face, unkempt hair, and a careless arrangement of his necktie.

Mrs. G.-G.: "Have you forgotten to do your hair? And just look at your tie! Why not begin breakfast?"

Dr. G.-G. (with profound abstraction): "The 'Tr. Rhei Co.' was moved, and I put 'Tr. Ætheris' into the mixture." (He goes out muttering to himself, followed by Mrs. G.-G., who begins to view his actions with alarm.)

Mrs. G.-G. (returning): "I am not going into that cold surgery. What is the man thinking about? Tr. Ætheris, too. What stupidity! I knew there was no such thing."

Dr. G.-G. (coming in again, still musing): "I could not find a 'Medical Report' form. My drawers were all in disorder. The patients kept arriving. I could satisfy no one. And yet there is the usual state of things down there. The 'Tr. Rhei Co.' in its old place, and, of course, no 'Tr. Ætheris.' There never could have been." (Placing his hand to his forehead and thinking deeply): "It must have been a dream."

Mrs. G.-G.: "A dream, did you say? Now I seem to recollect that you were very restless in the night. Do come to breakfast."

Dr. G.-G.: "Yes, darling, I will indeed. But what a beastly thing a confused realistic dream is. I could have sworn the 'Tr. Rhei Co.' was moved."

Mrs. G.-G.: "I often think you smoke too much at night, and read such a lot before coming to bed.

Dr. G.-G.: "Now you mention it, I did read about opsonins. A most confusing account, with terms enough to madden a bacterium, to say nothing of a man. Really I am disposed to congratulate 'The Continent.' It seems the opsonic craze has not arrived there. The results of the experiments here are said to be 'encouraging.'"

[Curtain.] S.

Some Notes on the Regulation of Teeth.

A Paper read before the Dental Society's Meeting on October 19th, 1906, by Mr. Hedley Visick.

Mr. Chairman and Gentlemen,—I have chosen Regulation Cases for the subject of my paper, as I think the treatment of cases requiring regulation to which the general term of orthodontia is applied, is a subject commanding more attention each year, and rightly so I think you will admit, for what a disfigurement irregular teeth are, not to mention the loss of masticating power owing to mal-occlusion. I hope this paper may appeal to freshmen who have all their "Regs." with their attendant difficulties before them. At the start of my paper I should like to say a few words about the Etiology of Dental Irregularities.

The *causes* of dental irregularities may be divided into three classes, viz.:—

(*a*) Hereditary. (*b*) Constitutional. (*c*) Acquired.

(*a*) *Hereditary* may be divided into—

1. *Direct*, in which a child inherits some distinct irregularity, just as he may inherit some other distinctive feature—and
2. *Indirect*, in which he inherits separate peculiarities which combined will cause an irregularity:—for example, the child may inherit large teeth from one parent and small jaws from the other, and thus an irregularity of some kind will be produced, but not inherited directly from either parent.

(*b*) *Constitutional*—

Constitutional irregularities are those which develop with the osseous system, such as those due to excessive development of the upper maxillary, inter-maxillary, lower maxillary bones, or the ramus or body of the lower maxillary bones, also hare-lip, cleft-palate, abnormal frænum labri, supernumerary teeth.

(*c*) *Acquired*—

1. Habits, such as lip biting, lip sucking, thumb sucking, toe sucking etc.
2. Premature loss of deciduous teeth.
3. Prolonged retention of deciduous teeth.
4. Loss of permanent teeth.
5. Tardy eruption of permanent teeth.
6. Bad dentistry: (*a*) loss of contour, (*b*) loss of cusps, (*c*) excess of filling occlusally.
7. Disuse. 8. Caries. 9. Adenoids, nasal obstruction. 10. Pyorrhœa. 11. Anchorage giving way. 12. Enlarged tongue. 13. Fracture. 14. Carcinoma. 15. Tonsillitis. 16. Children's diseases. 17. Scars, etc.

I just mention these causes of irregularities to show what a number of factors there are which may prevent normal occlusion. I must just say a word on the pathological conditions which may be caused by irregularities of the teeth.

1. *Caries.*—Irregularities of the teeth very often favour the production of caries, as the teeth may be placed in such a position that food readily collects between them, and the teeth cannot be kept clean even if the patient does use a tooth brush.

2. *Dyspepsia.*—Malocclusion—that is, a deviation from the normal occlusion—is a fruitful source of internal troubles, as proper triturition of food is impossible with teeth which present any marked deviation from the normal, thus the stomach gets overtaxed on account of the badly masticated food, and dyspepsia may be the result.

3. *Salivary calculus.*—Any irregularity of the teeth which prevents them from being properly cleaned either with a tooth brush or by the process of mastication, favours the production of "tartar" with all its attendant evils.

Having made a rapid *résumé* of the causes of irregularities and the effects which may be produced if the irregularity is untreated, I will now proceed to briefly discuss the *treatment* of irregularities:—

1. The *first* thing, in undertaking the treatment of a case requiring regulation, is to obtain *good impressions* of the upper and lower teeth. Do not be satisfied with a second-rate impression, as the models give great assistance in determining the treatment of the case; in fact, the treatment of any case should never be definitely decided upon before the models have been seen. The facial contour and profile having been studied, and the occlusion of the teeth having been compared with the normal, decide in your mind what is wrong with the case.

2. Having studied the models and the occlusion, it is a good plan to determine to which class of irregularities the case belongs. Dr. Angle's classification of irregularities is the one which seems to be best at the present time. In case there are any new men here who do not know Angle's classification of irregularities, I have written it up on the black-board.

3. Having determined to which class the case belongs, the third point to consider is: what appliance or appliances shall be used in the treatment of the case. This is a *most* important point.

As you all know, regulating appliances are divided into two main classes, viz., *fixed* appliances and *removable* appliances. I do not think it possible that one kind of appliance can always be used in *every* case, although some people are inclined to hold this view.

I will now endeavour to compare removable and fixed appliances, noting the advantages and disadvantages on each side.

Removable Appliances.

Advantages—

1. Patient can be sent away for a considerable time, and go on with the process, if intelligent enough.
2. If the appliance is broken, it can very often be repaired if sent, without the patient having to make a personal visit.
3. Appliance can be kept clean more easily than if fixed.
4. In case of illness, or if necessary, the appliance can be removed by the patient.

Disadvantages—

1. Patients do not wear appliance as directed, and may be inclined to take it out on every pretext, especially as removable appliances are very often so constructed and cumbersome that the patient is unable to eat with the plate in position.
2. Appliance may be easily broken by being trodden on, sat on, etc., or may even be lost or swallowed.
3. Parents may interfere with the appliance.

Fixed Appliances.

Advantages—

1. Can not be interfered with by patient or parents.
2. Teeth can be moved with exact precision and steadiness.
3. Very little interference with mastication and speech.
4. Fixed appliances do not usually touch the teeth in many places, and therefore are not so liable to produce caries.
5. Extreme simplicity of apparatus.
6. Mastication practically unimpaired.

Disadvantages—

1. Cannot be used in certain cases; for example, in the case of a society girl or an actress, who would not care to be seen with an appliance in her mouth in the evening.
2. Not so easily kept clean as a removable appliance.

There is another method of treating irregularities—that is, by *immediate regulation*. In this case the teeth which are out of position are immediately forced into position.

Advantages of this treatment—

1. Irregularity is corrected at once, and a retaining appliance only is necessary.
2. Patient does not have to make a large number of visits.
3. If patient is of a weakly temperament, he does not have to undergo a long and tedious course of treatment.
4. The other teeth are not affected in any way by this treatment.

Disadvantages—

1. "Accidents will happen." Tooth being treated may be fractured, accidentally extracted, or the pulp may be killed.
2. The other teeth in close proximity to the one being treated may be injured.

The application of this method of treating irregularities is very limited. In private practice I should scarcely consider immediate regulation is justifiable, except in rare cases, as the risks run are so great, especially in the case of a female patient who has so much to lose by being disfigured for life if an accident should happen. If an accident occurred in the case of a male patient, he probably would be able to grow a moustache to conceal the disfigurement. In certain cases, in hospital practice, this treatment seems very good, as it saves the patient the expense of repeated

visits, which is a consideration in a large number of cases.

I will not enter into the subject of *extraction* to correct irregularities, as there are apparently no rules governing the extraction of teeth for the correction of malocclusion. Cases may come up in which teeth may be displaced, due to presence of supernumerary teeth, or cases of exostosis, malformed roots, abnormalities, etc., but in these cases personal judgment must be used, as each man apparently has his own views on the subject. I am sorry I forgot to mention that in deciding what treatment you are going to adopt in any case, there are one or two important points to consider. I will just run through these points—

(*a*) Age of patient.
(*b*) General health and temperament.
(*c*) General character of the teeth.
(*d*) Presence and extent of caries.
(*e*) Direction of roots of the teeth.
(*f*) The occlusion of the teeth.
(*g*) General condition of gums.

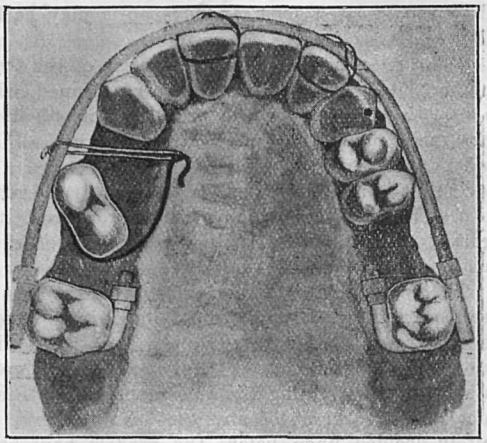
I should now like to show you a few models, which I will pass round, which will illustrate, more or less, the use of fixed and moveable appliances, also a case in which immediate regulation was undertaken. These cases I have had under treatment myself in this hospital, and I should like to say that they are not intended to be specimen cases *in any way*, as they are the first cases I have ever had under treatment, but they illustrate the general methods employed in regulation cases.

CASE 1.—Miss B. L., æt. 16. Intelligent patient, coming apparently from a good home, living within easy reach of the hospital, able to attend almost any time; occupation, school girl.

Everything in this case pointed to a fixed appliance being used. As you will observe, the case had been badly mutilated by extraction before the patient came to the hospital for treatment, the upper and lower first permanent molars on both sides, also the upper right first premolar, having been removed, thus precluding all idea of an ideal result.

The upper left canine was displaced labially, and the upper right second bicuspid was rotated a quarer-turn and in buccal occlusion. It was decided that the case would be greatly improved by rotation and bringing into line of the upper right second premolar and bringing into line of the upper left canine. Before this could be done the upper left premolars had to be pulled back to make room for the canine to come into position. This was accomplished by banding the upper second molars with Angle's clamp bands, and an expansion arch was adjusted. The upper left second, and then first, premolars were alternately banded and drawn back into position, one at a time, so that when in position they could not move forward again owing to the occlusion with the lower premolars. These teeth were drawn back by placing elastic bands round the premolars and back over the molar; to prevent the molar moving forward, the arch was ligatured to several of the front teeth so as to obtain additional anchorage. When the premolars were in correct occlusion, pressure was brought to bear on the misplaced canine, by placing pieces of rubber-dam between the arch and the labial aspect of the tooth.

The upper right second premolar was then bounded and a wire soldered on internally, so that when a rubber band was placed over the arch and over the end of the lever the tendency was for the premolar to be rotated. The rotation of this premolar took more time than any other part of the case, as of course the shape of the root prevented it being easily rotated. The diagram,



Apparatus for rotation.

kindly executed by Mr. Gibbings, will illustrate the use of the lever in rotating the premolar. Having rotated the premolar, it was brought into line by bending the arch so that pressure was brought to bear on it externally. When all the teeth were in line all the apparatus was removed, and a retaining appliance was adjusted, which consisted of a thin wire placed accurately round the front of the teeth, and soldered to bands cemented on to the upper second premolars on either side. The whole of this operation took just under five months (the patient being away at one time for seven weeks), and the patient made altogether about twenty-five visits.

I should like to impress on you the fact that this is *not* supposed to be a specimen case, but merely to give an idea of how long it takes to treat a case like the one under consideration under the circumstances extant in this hospital. Of course if orthodontia were our only subject, and provided the patient could come up frequently enough, a case like this could probably be completed in about half the time, but as we have many other things to do whilst we are here in this hospital the "Regs." have to take a second place.

I should just like to mention, before leaving this case, that in *all* cases where German silver wire or band metal are used is the mouth, it should be carefully gilded before fixing—both for the sake of appearance and for general cleanliness.

CASE 2.—This second case I bring before your notice is one in which a fixed appliance was impracticable.

Miss W. W., æt. 16, intelligent, coming from a good home, able to come up frequently; so far facts of case point to the use of a fixed appliance, but the patient is an actress, so in this case the occupation of the patient had to be taken into consideration, and a removable appliance was used.

This is one of the simplest cases—namely Class I.—normal occlusion. Angle's classification. In this case you will notice only one tooth, namely, the right upper canine, is to be moved.

I bring this case before you particularly as an appliance was used here which seems to be very effective, but very little used in this Hospital; this appliance is known as the "Jackson Crib Plate." I will just run through its *special* advantages:—

1. Cleanliness—case may be boiled if necessary.
2. Simplicity of manufacture.
3. Time saved in manufacture—no vulcanizing.
4. Ease of repair.
5. Palate not covered up to any extent.

I propose to go with some detail into the construction of this plate, as its uses are very varied.

The metals usually used in the construction of this plate are platinized gold and soft solder or tin. In hospital practice German silver may be used, but the amount of elasticity of German silver is not so great as that of the platinized gold, besides, the German silver is not so presentable in the mouth, although of course it may be gilded.

This plate must be made on an unstearined model. It is well to take a duplicate of the original model, which may be kept for reference.

I had better say at the start that the wires turned up outside the teeth with *both* free ends passing to the inner surface of the teeth are known as "*cribs*"; if only one end is brought to the inside of the teeth, the other end being left free, it is known as a "*half crib*." "Half cribs" are used where adjustment may be necessary, as one end being free the wire can be bent in almost any direction.

I have a model here which I will pass round to show how the ends of the wires are placed under the solder. (Case of model.)

The first thing to do in making a Jackson Crib Plate is to scrape the buccal surfaces of the teeth which are to be used for the cribs, so that if the wire fits the model accurately, when placed in position in the mouth, a little pressure will be necessary to force the cribs over the bulbous buccal surfaces of the teeth, and thus a more secure hold on the teeth will be obtained. I might mention that it is best that the portion of the wire to be covered with solder should not fit the model too accurately, as the solder then has a better chance of flowing under the end of the wire, and thus securing a better hold on the wire. The next step is take some thin German silver plate and cut out crescentic-shaped pieces of the metal, which are accurately turned up to fit the inner surfaces of the teeth. This metal may be quite thin, as it is used partly to ensure the solder flowing accurately round the necks of the teeth, and partly to give a better wearing surface than the solder alone would present. In order to hold the pieces of metal in position when soldering, one end of the wire used to make the "crib" is bent in such a way that the end impinges on the centre of the piece of metal; this is shown on the model passed round. The next step is to bend up the main bar which holds the two halves together. This bar should be the thickness of the shank of an ordinary burr, and should be bent in such a way that it is quite clear of the bite of the lower teeth. Any other wires for retraction or pushing out teeth should now be bent up, so that the end to be covered with solder shall be quite close to the model, so that when the case is finished the wire will not be exposed.

When all the wires, etc., are bent up and placed in position for soldering, it is safest to drop a little wet plaster on the ends of the wire outside the teeth, and also over the centre of the main wire, to make sure that nothing shifts in soldering. The little pieces of plaster can very easily be picked off the model when the case is completed. Dr. Jackson himself advocates holding the pieces on the model with a duster while soldering, but I think the use of plaster does away with all risk of the parts being misplaced.

The next thing is to solder the parts together.

Plenty of soldering fluid should be used on the wires. The best instrument to use in soldering one of these cases is the instrument known as "Ladmore's soldering tool." I have one here which I will pass round. You will observe it is merely a little soldering iron kept at a steady temperature by means of a little gas jet which impinges on the iron the whole time. With one of these instruments the solder may be worked with the greatest ease, and a very smooth surface will be the result of carefully finishing off with the iron. Any additional finishing off required may be carried out in the usual way.

This description sounds rather long and wearisome, but as a matter of fact a good mechanic can turn out one of these cases in an incredibly short space of time, especially after a little practice, the whole case being fiuished in the space of time usually taken to vulcanize an ordinary vulcanite plate.

I have here a series of six models from the Guy's Hospital Museum showing a case treated entirely from start to finish with a Jackson crib plate; I have put the models in two sets of three each which should be passed round together. I have also here two completed plates, kindly lent me by Mr. J. H. Badcock, who uses this class of plate fairly extensively when a removable appliance is necessary. Mr. Badcock also uses the Jackson cribs extensively in vulcanite work for regulation cases, as the cribs give a better hold than the old method of bringing the vulcanite right over the masticating surfaces of the teeth in order to obtain a good hold, thus propping open the bite, spoiling the masticating powers of the patient, and giving the teeth a good chance of becoming carous. To repair one of these Jackson crib

plates it is only necessary to melt the solder over the wire to be moved or altered (which can be done very easily by the one who made the plate originally), and when the wire is bent to the required shape it may be replaced, and a fresh lot of solder flowed over it, thus doing away with the vulcanizing required in an ordinary repair.

You will naturally immediately ask, "Doesn't the solder taste nasty in the mouth?" "Doesn't the solder turn black and discolour the teeth?" To the first question, *re* the taste, I reply on the word of my patient that the solder does *not* taste nasty. To the second question, *re* discolouration, I reply that the solder does turn dark in colour, but the teeth are not in the least affected, especially as the teeth are protected by the pieces of German silver plate fitting against the inner surfaces of the teeth.

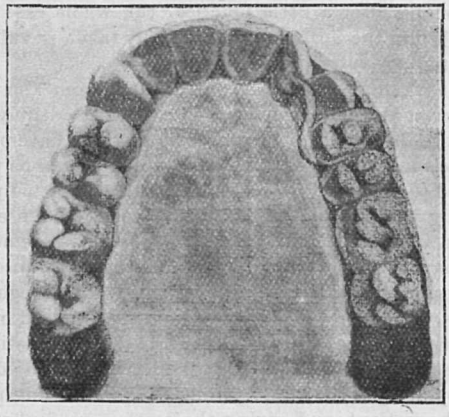
Any further questions about this kind of plate I shall be pleased to try and answer to the best of my ability.

Case 3.—The third case I bring before you is one in which immediate regulation was made use of—alveolotomy being performed by Mr. Payne.

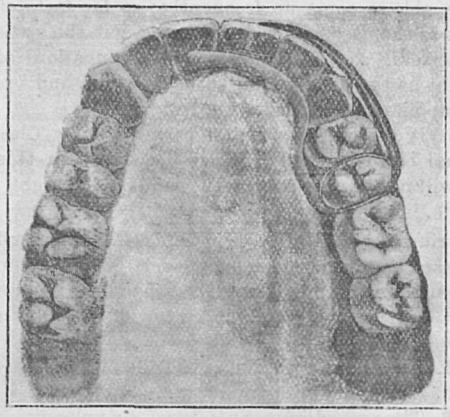
Patient, F. T., boy, æt. 14, came up to Guy's with left upper canine misplaced well *inside* the arch, the other teeth were quite regular except the upper left lateral, which was slightly displaced outwards and partly rotated. All the teeth were quite free from caries except for a small mesial cavity in the upper left first molar. The boy was studying for an examination, and therefore not able to attend very frequently. This is a very suitable case for immediate regulation.

A splint having been prepared, as shown in the diagram on the board, the operation for the forcible moving of the canine was carried out under ethyl chloride. The instruments used in the operation Mr. Payne has very kindly lent me for this afternoon.

As soon as the patient was well under the anæsthetic, a vertical incision was made in the alveolus, on either side of the canine, to be moved as indicated by the lines on the model, the instrument used being one of the little saws here shown; the tooth and alveolus were then gripped by the forceps and moved out bodily by a steady outward motion, and the splint was then immediately applied while the patient was still under the anæsthetic. The patient was afterwards seen in the conservation-room, and the wound was well cleansed and the patient given a mouth wash, instructions being given to keep the mouth very clean.



Splint applied under anæsthetic.



Appliance for retention.

After a few days, when the inflammation produced by the operation had subsided, a new, well-fitting splint was cemented on to the teeth and left for one or two weeks. Another appliance was then made to push the upper left lateral into position, the canine still being held in position. This having been accomplished, a retaining appliance was made and adjusted, as shown in the diagram, and the patient was sent away for three months. At the end of this time the patient was seen again, and everything was satisfactory, including the fact that the patient had passed his examination. The retaining appliance was now removed. The canine was tested and was found to respond perfectly to thermal tests. I have already mentioned the advantages and disadvantages of this course of treatment, and I think you will agree that in this case the result was very satisfactory.

Having had such a short experience, I am afraid I have not been able to give you any new or startling ideas, but I hope this paper may be the subject of a profitable discussion which will enable us to understand the subject better.

Deaths.

SHEEN.—On December 16th, at Halswell House, Cardiff, Alfred Sheen, M.D., M.R.C.S., D.P.H., aged 67, Consulting Surgeon to the Cardiff Infirmary.

WILLIS.—On December 4th, at Horrabridge, Devonshire, Richard Willis, M.R.C.S., L.S.A., aged 86.

Ed.—C. L. L.

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